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NEWS SUMMARY

GENERAL BUSINESS

Danish Grocery refusal starts air row... Danish Grocery bill rise slows to 8.7%

Prison mutiny... Abadan blast... Hijack dilemma... Company law reform proposed

Man dies in race... Briefly... Rex Magna won the French St. Leger from Trillion...

Tory health plan... Prescription charges should be raised suggested Mr. Patrick Jenkin...

Briefly... Rex Magna won the French St. Leger from Trillion...

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Table with 2 columns: FEATURES and FT SURVEY. Includes items like 'The Spanish economy', 'Construction plant and equipment'.

Hyde Guidelines agreement is expected today

By MICHAEL LAFFERTY... FINAL AGREEMENT to support the new inflation accounting initiative known as the Hyde Guidelines is expected from the accounting bodies and the Stock Exchange today.

Pressure rises for early exchange rate decision

By PETER RIDDELL, ECONOMICS CORRESPONDENT... THE GOVERNMENT is facing increasing pressure for an early decision on whether to allow a rise in the sterling exchange rate in response to continuing heavy inflows of foreign currency.

Queen's Speech has poll slant

By PHILIP RAWSTORNE... THE GOVERNMENT'S programme for the new Parliament session which opens on Thursday has been drafted to meet the political demands of the Lib-Lab pact and the approaching General Election.

Minority rises to five

By PHILIP RAWSTORNE... Mrs. Miller, who entered the Commons in October 1974, had a majority of 778.

Dell to detail exports scheme

By Kenneth Gooding, Industrial Correspondent... DETAILS of the scheme by which the Government hopes to help smaller companies develop new export markets will be given by Mr. Edmund Dell, Secretary for Trade.

Budget

Details are being worked out by the British Overseas Trade Board with working parties and other industry representatives.

Carter's men give warning on S. Africa

BY JURK MARTIN WASHINGTON, Oct. 30... TWO SENIOR members of the Carter Administration made clear to-day that if South Africa did not make internal social changes, the U.S. believed that the threatened racial conflict could turn into an international ideological confrontation on the continent.

Deadline

Both officials were careful to note, as had Mr. Carter last week, that South Africa had shown itself willing to be helpful in resolving the Rhodesian and Namibian problems.

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Orfeo ed Euridice

by ELIZABETH FORBES

The Wexford Festival rarely establishes operatic masterpieces, but Thomson Smith, now in his fourth season as artistic director, has been relatively bold in this respect and Britten's *The Turn of the Screw* was the chief success of last year's festival. *Orfeo ed Euridice* has been established as a masterpiece for well over two centuries, and while Gluck's opera is not the chief success of 1977—I award my *palme d'or* jointly to *Herodias* and *La serva e l'assero*, already noticed—it has certainly been the focal talking point of this year's repertory.

The avowed intention of Wolf Szeffler's production is to shock, and though the Wexford audience does not seem to be in the least shocked, Mr. Wagner certainly succeeds in startling them into fresh appraisal of a work too easily labelled with the safe title of a classic. Dacre Punt's setting, a *rompe-la-tête* effect of mirrors and baroque architectural engravings scrupulously drawn by Paul Draper, is matched by Alex Reid's ravishingly pretty 18th-century costumes; the chorus, banished back stage, is represented by a small group of dancers from the Irish Ballet, whose movement is mainly stylised.

So far, so conventional: but Messrs. Wagner and Punt have introduced a symbol, usually wholly modern by implication, into each scene: Euridice's remains—there has obviously been an autopsy—float in a glass tank of formaldehyde; a plant hypodermic is used to inject Orpheus with the Furies' venom; round him, two dancers, naked but for body stockings, invade the pastoral Elysian Fields; a huge metronomic ceases its regular beat the instant that Orpheus turns to look at Euridice; a sofa, fashioned from a monstrous, scarlet-lipped mouth

—no awards for guessing what that symbolises—accommodates the reunited pair at the end. None of these deliberate challenges intrudes on the music, using the original 1762 Vienna edition, shorter and plainer but more dramatic than the later Paris version. Jane Glover conducts a stylish performance. The RTE Symphony Orchestra and the invisible festive chorus, perhaps exhausted from their triumphant efforts in *Herodias*, are in slightly subdued form: the dancers execute Domy Reiter-Seiffert's apt choreography with elegance. Kevin Smith, a counter-tenor Orpheus, fills the resonant

Theatre Royal with his plangent, even-toned singing. He phrases exquisitely, as does Jennifer Smith, an enchanting Euridice who moves as gracefully as she sings; in duet their voices both contrast and blend superbly. Anna Benedict makes a lively Amor.

Non-operatic events this year have included an interesting recital by the mezzo-soprano Kerstin Meyer, accompanied by Jonathan Hinden. Three of Mahler's Rückert settings did not, perhaps, make ideal opening



Kevin Smith in a scene from *Orfeo ed Euridice*

material, but some Wolf songs, in particular "Begegnung" (Meeting) and "Das verlassene Mädchen" (The deserted servant-girl), were expressively interpreted. Ravel's *Histoires naturelles* brought the singer's vivid dramatic talents into play, but it was Grieg's touching *Haugtussa* cycle (The mountain maid) that most fully engaged her sympathies—as well as the listener's—and with which she identified most strongly. Sibelius's "Var det en Dröm?" (Was it a dream?), an encore made one wish that Miss Meyer had included more songs in her native language, Swedish.

Korunk Zenéje—1

Hungarian Contemporary Music

by DOMINIC GILL

The days of *Korunk Zenéje*—Contemporary Music—in Budapest this autumn were reduced from twelve to eight, while the number of concerts during the period increased from 16 to 17. Such a concentration of musical events, almost Royan-like in its profusion, but still of unmistakable Magyar style and charm, marked the 40th anniversary of this important Hungarian festival now grown, after the initial tentative steps three years ago, when new music was included as a separate category in the Budapest Music Weeks for the first time, to a full-blown and impeccably organised celebration, worthy of comparison with any like-minded festival in Europe east or west. (Sad thought that Britain, with all her traditions and resources, is unable, or sadder still, unwilling, to produce these days any kind of national festival of contemporary music at all.)

The products of *Korunk Zenéje* are still, as they should be, chiefly home-grown. The festival's first concert, given by the Budapest Chamber Ensemble under András Mihály, framed by Webern and Stravinsky, offered two contrasting first performances of works by the older and the younger generations. *Hullámok I & II* ("Waves I & II") by István Lang (b. 1933) combined two short pieces, the first for vibraphone and soprano, the second for cimbalom, flute and guitar; a quick, confident essay in the post-war west-European idiom, not so particularly remarkable a quality, but with quicksilver here by a brief appearance of the wonderful Márta Fehér. Miss Fehér is not merely the greatest cimbalom player in the world (competition is fairly slim); she is a musician who charges every sound that she draws from her unusual instrument with extraordinary force, electrifying tension. Without her, I suspect, Lán's waves would have seemed no more than ripples on a glassy stream.

The younger generation in Mihály's programme was represented by Balázs Szunyogh (b. 1954), whose 16-minute *Variations for chamber ensemble* made a mixed impression: an exhilarating, not-purely-instrumental work from Stravinsky to Big Band Swing, shot through with some sensitive lyrical-instrumental weaving, but also curiously indecisive, undisciplined in shape and direction. One sensed an emerging young talent, with fine ear for instrumental combination, as yet without centre, still searching for his own individual voice.

I first noted Szunyogh at the *Korunk Zenéje* last year in a lively concert entitled "We Present our Young Composers." This year the same event, presented by the youth section of the Hungarian Musicians' Association, I found more disappointing. *Variations II* by László Márton, for flute, cello and percussion, accompanied throughout

by a metronomic pok-pok tone recorded on tape, contained the seeds of an interesting structural idea; but the effect in execution was almost wholly vacuous, a "good-idea piece" worked without any kind of grip or focus, and at 13 minutes, far too long for sense or comfort. A *Baloldár* and *Rondó* by Iván Székely for soprano, flute, horn and viola and a John Donge Sonnet setting for soprano, piano and six percussionists by Iván Madarász were likewise both prime examples of student note-spinning which I recognised keenly from my own RAM days: precisely the kind of elaborate, baseless confection which professors everywhere encourage and admire. A short, neat essay for a capella SATB choir by András Feher called *Barokk Song* stood out alone from the student list—not so much for its originality, as for its genuinely firm and consistent working, and its imaginative manipulation of derivative techniques (chiefly Ligeti-like part-clusters and slow glissandi).

Another afternoon concert in the hall of the Liszt Academy the previous day, devoted mainly to the work of younger composers, was more inspiring. The programme was shared by the pianist Adam Fellegi and the flautist István Matúz—two of the many superb young instrumentalists still in their twenties or early thirties, but already outstanding artists of world

The Entertainment Guide is on Page 8

rank, who have emerged from the Budapest Academy in the last decade. After hearing Matúz last year, and especially his performance at the final concert of his own new arrangement of Jolivet's *Cinq Incantations*, one of the climaxes of the festival, I called him without hesitation one of the finest flautists in Europe to-day of any age, young or old. This year, he confirmed that judgment. The account he gave of his own *Study No. 3* for solo flute was one of the most original, engaging and powerful of the week's programme, and one of the most exciting: a single 7-minute glissando, endlessly slow, taken without break in a single "circular" breath, the line as it ascended and descended with all manner of overtones and partials deep chords, fluttering resonance.

In the same programme, Matúz also gave a brilliant crystalline account of *Cassandra's Dream* song by Brian Ferneyhough; and the first performance of an attractive new piece by László Dubravay, *Streams No. 2*—a reverie for four flute voices, one live, and three on tape. As the streams pass, the live voice, delicately amplified, picks out a pattern of slow bass-tones from the main current, a shimmering

texture of upper partials: simple idea, beautifully conceived. Fellegi's material was less interesting: a pair of flighty keyboard fantasies by Csaba Szabó, a busy, noisy and fairly anonymous *Improvisation* by Miklós Kocsar, and a set of six little piano pieces by Lajos Huszar, entirely unmemorable. But the performances were excellent: strongly made, pungent, and in the circumstances, I thought, given with remarkable dedication. For a finale, Fellegi joined forces with Matúz to play the first performance in Hungary of *Metamusic* by the English composer David Hellewell: a deft, engaging duo for the two instruments, carefully made, delicately pointed, done here with great finesse.

For the first time this year the *Korunk Zenéje* included a concert given by members of the New Music Studio—home of the more experimental (and from the "official" viewpoint, more dubious) wing of new Hungarian music. In past years I have heard a number of works from the Studio horns festival on tape—and devoted considerable space to them in my reviews, since the Studio is semi-official status, some of the most original, engaging and provocative works to be heard in Hungary to-day.

That the concert itself was only partly successful was of far less importance than the fact of its inclusion: public work can only be judged on the public stage. With characteristic energy and flair, the Studio devoted two-thirds of its programme to recent works from abroad; a promising, but slightly unfocused account of Kagel's bicentenary Beethoven college student work, full of pretty moments, but a shade too serious, too difficult in its approach. (It is salutary to remember that Kagel's own performance of *Ludwig Van* is not only "beautiful" but also very funny indeed.) The group also gave a very dedicated performance of Frederick Rzewski's *Coming Together*—a more gutsy choice of instrumentation especially (perhaps something in the line of electric guitars and saxes) sounded less like hot-gospel gone cold.

But *Souvenir de J* by László Vidovszky—with Zoltán Jeney and László Sáró, one of the three founding composers of the Studio—I liked enormously: an unrehearsed "communal study" for 52 musicians of non-musicians, friends and children, who crowded the Academy stage each holding a pipe tuned to a different microtonal interval, and at a signal passed chords among each other from group to group, across, then up and down, then like a snake in and out between the lines, a moving map of sound. A gentle, courteous piece, full of love and quiet humour; magical finale.

The triple bill was rightly designed to give a chance to as many students as possible. A few names must be mentioned. In the Purvell, the severest test of good singing, the counter-tenor, Philip Newton, showed real distinction (and showed it again as the off-stage cat in *Tobermory*) but coaching had evidently been brought in. In the Gardner piece, we heard a strong mezzo, Clare Moll, as the governess. The Sullivan brought a lively, verbally dexterous Judge (Richard Stuart), a handsome, full-voiced soprano Plaintiff (Elizabeth Brice), and as Defendant, a useful light tenor with gift for comedy (Keith Hoare). Further performances to-night and to-morrow with an alternative cast for *Trilby* by Jerry.

passages that mars many professional operetta performances. But why did the programme describe Gilbert's Counsel for the Plaintiff as "for the Defendant"? The triple bill was rightly designed to give a chance to as many students as possible. A few names must be mentioned. In the Purvell, the severest test of good singing, the counter-tenor, Philip Newton, showed real distinction (and showed it again as the off-stage cat in *Tobermory*) but coaching had evidently been brought in. In the Gardner piece, we heard a strong mezzo, Clare Moll, as the governess. The Sullivan brought a lively, verbally dexterous Judge (Richard Stuart), a handsome, full-voiced soprano Plaintiff (Elizabeth Brice), and as Defendant, a useful light tenor with gift for comedy (Keith Hoare). Further performances to-night and to-morrow with an alternative cast for *Trilby* by Jerry.

Duke of York's Laburnum Grove by B. A. YOUNG



Honor Shepherd, Arthur Lowe and Deborah Watling

J. B. Priestley's veteran comedy and order. This production, directed by Hugh Goldie, is for the most part as beautifully planned, in the first act George Radfern, the archetypal suburban bore, announces to the family parasites that he is not just some "reminds me of a polar bear," but thing in the paper trade, he is head of an international gang of forgers. Throughout most of the second act he is away, like Hamlet or Macbeth (no great writer should be too proud to take hints from a master), and we have much hope of solving his case—waites round and round in the third act there is a convincing as that in *Plunder*. The conclusion is sufficiently un-expected, even if it is a snub to law

where Mr. Goldie has allowed too much farcical byplay, such as Simon Merrick's juggling with his suitcases. Sam Kydd's comic exit through the greenhouse, the romantic young couple Elsie and Harold are redempt of the "thirties in the hands of Deborah Watling and Rob Edwards, though not very romantic, Simon Merrick and Honor Shepherd are the parasitic uncle and aunt. Joan Cooper is George's wife, as square as the family, imagine George to be, and Dermot Walsh plays the Inspector. The sitting-room, by Hutchinson Scott, is all that the sitting-room in Laburnum Grove, Shooters Green, N.

described as satisfactory, except should be.

Westminster Cathedral

Christus by RONALD CRICHTON

Liszt's oratorio *Christus*, the largest of his choral works, brought to a splendid climax the profusion of musical events big, small, and various, that during the past six weeks have made up the first Festival of London. The musical public hard to get now for lesser things, still has a nose for real occasions. Westminster Cathedral was well filled on Friday evening for the performance given by the Liszt Festival Chorus, St. Angela's School Choir, the Royal Philharmonic Orchestra, and four distinguished soloists, conducted by Brian Wright. Dust may settle on the memory of some of the other Festival activities, but this event will undoubtedly be remembered.

Christus was written, over a number of years, in Liszt's middle life, in Weimar and Rome. The greater part dates from the early and middle 1860s. The complete performance (the separate sections had already been heard in various places) was given in Weimar under Liszt's direction in 1873. Like many of his works, major and minor, it has been sadly neglected. Friday's performance was apparently the first in this country—indeed, indeed, indeed, of oratorio in Liszt's own century—though surely isolated numbers must have been done here?

The question of parts and whole throws light on the nature of the work and provides a possible explanation for neglect. Liszt described *Christus* as his "musical Will and testament." The Latin text, assembled by the composer from mainly Biblical sources, concentrates on the Franciscan side of his nature that co-existed with a handsome, full-voiced soprano Plaintiff (Elizabeth Brice), and as Defendant, a useful light tenor with gift for comedy (Keith Hoare). Further performances to-night and to-morrow with an alternative cast for *Trilby* by Jerry.

together), the modal colouring recorded one. The instrumental writing (Bartók ranked Liszt from folk as well as ecclesiastical sources) and the variety—on orchestral set-pieces (passionals, processions, a tempest) the most part transparent in which voices play a minor role to quiet movements for voices and organ alone.

Anyone aware of the oratorio's reputation for size and length may be disconcerted to find how simple and restrained much of the writing is. Hyperbolic adjectives like "great" lead the way to expect a closely-worked score of Berliozian or Mahlerian epic grandeur. Not so—the three parts, *Christus* Oratorio, *After Epiphany*, *Passion*, and *Resurrection*, can be given separately as many of the individual numbers. *Christus* in some ways resembles a series of Biblical pictures in music—there is a touch of high-minded naïveté also to be found in Liszt's *Legend of St. Elizabeth*, reminding of the painter's Nazarene school. Yet the impression is not one of disjointedness. The extraordinary personality is unmistakably there, many of his works, major and minor, it has been sadly neglected. Friday's performance was apparently the first in this country—indeed, indeed, indeed, of oratorio in Liszt's own century—though surely isolated numbers must have been done here?

In fact the length of *Christus* has been exaggerated. Even in the uncut Hungarian recording (six sides) there is less than three hours music. On Friday, Brian Wright used the cuts made by Liszt for the 1973 Weimar performance (these are not given in the *Eulenburg study score* but were apparently published in an appendix to the full score of 1874). Necessary they may be for practical reasons, but also drastic. Much charming if slightly prolix pastoral writing goes, so does much of the hitingly chromatic "Tristis est anima mea"; the proportions of the *March of the Three Kings* were helpfully listed on the programme sheet handed out in the cathedral. The pages not given on Friday can fortunately be heard in the recording. Mr. Wright's reading, though less polished, and no doubt much more quickly prepared was more lively and committed than the

There is much more to say about the music but not room to say it. I must however mention the profound effect made by the compact but inward setting of the Beatitudes for baritone, choir and organ, the solo magnificently taken by Willard White. The baritone has the lion's share of the solo work (and Mr. White did full justice to it), but the others have glowing phrases in the ensemble, devotedly sung on this occasion by Lois McDonall, Sarah Walker and Robert Tear. Now *Christus*, in whole or in part, must not be allowed to be neglected any more.

Prof C NORTHCOTE PARKINSON and NIGEL ROWE will sign copies of their new book COMMUNICATE Parkinson's Formula for Business Survival at the BARBICAN BUSINESS BOOK CENTRE 9 Moorfields, London. EC1 on Wednesday 2nd November between 12.30 and 2.00 p.m. "I hope that business leaders will practise what Parkinson and Rowe so ably preach." Peter Drucker CS 95/Premice-Hall

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The Outlook for 1978 "The present year has started well... I feel confident that we can look forward to further significant increases in turnover and profit for the year to 30th April 1978. We are continuing our programme of internal growth and development, but, at the same time, we are looking for further opportunities which will allow us to take advantage of the improving climate in the Tourist and Leisure Industries."

John Chapple, Chairman

The Results for 1977

	Year to 30th April 1977	Year to 30th April 1976
Group Turnover	£7000	£7000
Profit before tax	24,246	22,480
Shareholders' Funds	925	732
Net Dividend per share	3,674	3,367
Dividend cover	1.938p	1.735p
Earnings per share	3.3	3.0
	6.4p	5.2p

If you would like a copy of the Report and Accounts, please write to: The Secretary, 412 Marybone, Liverpool, L3 2BY.

Sir Jack Lyons Theatre

Tobermory by RONALD CRICHTON

The new theatre for the Opera Class of the Royal Academy of Music was opened on Wednesday by the RAM's President, Princess Alice, Duchess of Gloucester. The four year wait since the cramped little stage and auditorium formerly on the site of Marlborough Road were pulled down, though it may have seemed endless to those most concerned, has been rewarded. The stage is now larger than the whole of the old theatre put together. The pleasant, small auditorium seating nearly 300, is simply but warmly decorated in grey and cyclamen pink—concrete there may be but it is neither seen nor felt. The sound, from a seat in the fifth row, was clear and well-balanced. There is not much extra resonance to help the voices, but they were not fighting. One believed what one heard.

For the occasion, John Gardner had written one-act operatic version with libretto by Gavin Ewart of the short story *Tobermory* by "Saki"—the one about the family cat enticed by a visiting lord with powers of communication which he uses to reveal indiscreet secrets about a house-party. I haven't read the story, but judging from what better educated colleagues tell me, the ending has been considerably altered. The inconvenient cat, having survived the efforts of one of the house guests to poison him, is conveniently destroyed off-stage by a marauding rival. Gardner has written some ensembles—one before the zoology

gists' entrance, another after the cat Tobermory's off-stage revelations, and a quintet-epilogue—which show a sure touch for light comedy in music. There are also two short instrumental interludes to mark the passing of time, which do precisely that. Less happy at a first hearing was the setting of the sub-Coward, twenty-ish dialogue, heard for young singers to do naturally (and for that reason, of course, excellent training). I suspect that the duet for Lady Blemley and Bertie is one of the good things in the score, though it did not quite make its effect on Wednesday. *Steuart Bedford* conducted. Dennis Maunder presented. The circular seat in the middle of the stage was an unnecessary obstacle.

Tobermory was preceded by the *Mask of the Seasons* from Purvell's *Fairy Queen*, conducted by the RAM's Principal, Sir Anthony Lewis, with his easy-seeming flair for the right tempo and followed by *Trilby* by Jerry, based on Sullivan's manuscript full score, long lost but now in the Pierpont Morgan Library of New York. This small masterpiece of operatic burlesque was rompsily produced by Anna Sweets. It was good to hear the good Handel and mock-Bellini sung with full and enthusiastic choral tone. Though the Jury nodded briefly, chorus and orchestra remained firmly together under Mr. Bedford's direction, none of that coming unstuck in simple

Festival Hall London Bach Society

On Friday Paul Steinitz conducted the London Bach Society and his Steinitz Bach Players, with the Bulmershe Girls' Choir, in Bach's B minor Mass. Occasionally the chorus overbalanced the modest (though expert) orchestra, but the performance had the usual virtues of Dr. Steinitz's work: intelligent clarity, light-footed tempi, nothing grandiose or monumental. The "Sanctus" was a lesson in how to achieve breadth of scale without pomp. At the extremes of dynamics, there was some loss of focus—the "Gloria" made a joyous but confused noise, and the theme for the "Quintus" was the "Crucifixus" was contrapuntal impress. A certain rigidity in Dr. Steinitz's beat made for awkward tempo-changes, like the lurch into "Et in terra pax," but generally his tidy intentions were happily realised.

The female soloists were Margaret Field and Alfreda Hodgson, an excellently matched pair. Neither the tenor nor the baritone was heard to advantage in the first half—the baritone was large for John Elwes' voice, and the "Quoniam" lay uncomfortably low for Stephen Roberts' voice—but Elwes rose to the "Benedictus" with natural sincerity, and Roberts was fully in command of "Et in Spiritum Sanctum." Those who paid 30 pence for programmes may have been surprised to find that they included the bare text of the Mass, four and a half pages of notes on the artists, and another two of advertisements for records and forthcoming concerts by the London Bach Society, but not a word about the work itself (the genesis of which makes an extremely interesting story) nor even its dates. The expense might better have been borne by the artists' agents.

DAVID MURRAY

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OVERSEAS NEWS

Ban on Scandinavia flights by U.K. angers Denmark

COPENHAGEN, Oct. 30. The Danish Transport Minister, Mr. Kjeld Olesen, today accused Britain of trying to blackmail Denmark into allowing new British flights to Copenhagen.

Schleyer tape critical of Bonn security

Political controversy erupted this week-end over the contents of a hitherto undisclosed tape recording made by the late industrialist Dr. Hanns-Joachim Schleyer soon after his capture by terrorists.

THE SEARCH FOR A RHODESIAN SETTLEMENT Mugabe objects to Carver

DAR ES SALAAM, Oct. 30. Owen has our objections on his desk but we have not heard from him. In Lusaka, sharp differences within the Patriotic Front and the deep dispute between militant blacks and whites over U.K.-U.S. proposals provided a gloomy background to the talks in Dar es Salaam.

SOREC LIMITED (Incorporated in the Republic of South Africa) INTERIM REPORT Following the merger of the company's former ultimate holding company, Rand Selection Corporation Limited...

Table with financial data: Group profit before taxation, Taxation, Group profit after taxation, Interest of Sores shareholders in profit after taxation, Earnings per share, Dividend per share.

Austere Portugal budget

DETAILS of the 1978 Portuguese budget have now been published. Parliamentary debate on it is due to begin shortly. The budget reflects the demand by the International Monetary Fund that Portugal cut public and private spending and reduce its balance of payments deficit...

Lithuanian disturbance

A Soviet dissident just returned from Lithuania said yesterday that local people chanting nationalist slogans clashed with police in Vilnius this month. A police official denied last night that anything serious had happened.

Two die in protests against Gandhi

TWO PEOPLE were killed in riots in Madras, capital of the southern State of Tamilnadu, when police fired on crowds demonstrating against Mrs. Indira Gandhi, the former Prime Minister, who is touring southern India.

THE MIDDLE EAST Israelis strike over floating of pound

MUCH UNCERTAINTY surrounds the implementation of the Likud Government's new economic policy, announced on Friday, which hinges on the floating of the Israeli pound and the liberalisation of foreign exchange controls.

Philippine referendum

The Philippine Legislative Advisory Council voted yesterday to call a national referendum on December 17 on whether President Ferdinand Marcos should continue ruling with a new constitution.

Argentine strikes

Normal train service was restored yesterday in Argentina after four days of wildcat strikes, but underground railways were still out of service and air-line personnel threatened further strike action.

Gen. Zia on tour

Gen. Zia-ul-Haq, left yesterday on a five-day tour of Middle East countries in what is taken here to be another attempt to acquire aid to bolster the ailing economy.

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Advertisement for Thomas Cook Travellers Cheques. Includes text: 'You're going to need money when you're there. Australian dollars. Surely it's more sensible to buy them here and take them with you.' and an image of a man in a hat.

EEC rebuff on PLO issue

WITH A WEATHER eye on U.S. President Jimmy Carter's current Middle East diplomacy, the EEC has resisted strong Arab League pressure to recognise the Palestine Liberation Organisation (PLO) as the sole legitimate representative of the Palestinian people.

France expels Polisario men, hints at intervention

AGAINST a background of Southern Sahara while on holiday hints that it might intervene militarily to free at least a French doctor and his wife French citizens abducted by Polisario guerrillas in Mauritania...

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Advertisement for The Army Benevolent Fund. Includes text: 'The war that never ends. We British are a peaceful people. When a war is over we like to consign it to the history books - and forget it.' and an image of a soldier.

Advertisement for The Army Benevolent Fund. Includes text: 'The war that never ends. We British are a peaceful people. When a war is over we like to consign it to the history books - and forget it.'

كذلك من الأهل

WORLD TRADE NEWS

Krupp ties with Iran lead to \$143m. order for copper plant

BY LESLIE COLLITT IN BERLIN AND ADRIAN DICKS IN BONN

Krupp's Industrie und Stahlbau... The Belgian company... National Iranian Copper Industries worth \$143m.

Ford still on Arab black list

KUWAIT, Oct. 30.

KUWAIT, Oct. 30. KUWAIT, Oct. 30. KUWAIT, Oct. 30. KUWAIT, Oct. 30.

COMECON SHIPPING

EEC watch on Eastern fleets

BY DAVID BUCHAN, IN LUXEMBOURG

SHIPPING is at last getting close attention from EEC policy makers. The catalyst for this has been the astonishing growth in Comecon fleets' share of bilateral trade with the EEC...

New chief for Bahrain Monetary Agency

BY DOINA THOMAS

BAHRAIN, Oct. 30.

MOST two years since the Bahrain off-shore banking market was launched, the Bahrain Monetary Agency has announced a change at the top.

Australia beef rebuff

BY GUY DE JONQUIERES, COMMON MARKET CORRESPONDENT

BRUSSELS, Oct. 30

THE EUROPEAN Commission dealt a sharp rebuff to the Australian campaign being waged in Brussels to persuade the EEC to grant more generous access for its exports of beef and other agricultural products.

Scotch exports to U.S. up

FINANCIAL TIMES REPORTER

BOOSTED by heavy imports in September in front of expected strikes in the U.S., Scotch whisky exports in the first nine months of 1977 rose by 8 per cent in volume to 70m. gallons and 28 per cent in value to \$28.5m, compared with the same period last year.

Contracts

Fiat of Italy has ordered 100 Unimate industrial robots from Omelco... The Turkish Petrochemical Organisation, Petkim, has announced the signing of a \$2.5m. (C\$3m.) credit agreement with four Swiss banks... Brush Power Equipment, of Barking, a Hawker Siddeley company, is to supply electrical equipment to Iran in a £20,000 deal with ASEA of Sweden.

Today's Chase.



Alan H. Ulrich - Vice President, Manager, Foreign Exchange Trading, London

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opportunity markets with all their complexities is at your disposal through Chase's trade finance specialists.

Chase Information Group You can't make decisions or even know where to look toward expansion without all the facts. Chase World Information Corporation provides just such information for companies around the world.

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World Economic Indicators

Table with columns for Country, Industrial Production (Sept. 77, Aug. 77, July 77, June 77, May 77, April 77), and % change on year. Countries listed include U.S.A., U.K., West Germany, France, Holland, Japan, Italy, and Belgium.

HOME NEWS

CBI makes new bid to woo business

BY JOHN ELLIOTT, INDUSTRIAL EDITOR

A FRESH bid to turn the CBI into a Confederation of British Business covering all aspects of industrial and commercial life is likely to be made shortly after the CBI has held its first annual conference in two weeks.

The first step is expected to be talks between the CBI and the Association of British Chambers of Commerce to see if the two can extend their existing limited joint operations into a more formal link-up.

The CBI has been expanding its members extensively in recent months, most notably by attracting financial institutions such as insurance companies, and by recruiting retail concerns such as Marks and Spencer and John Sainsbury.

This has turned what has historically been a centre for manufacturing industry into a wider based organisation, and now the CBI's leaders, including Mr. John Methven, CBI director general, are known to be keen to change the title to incorporate the word "business" instead of "industry."

The title Confederation of British Business was first con-

ceived by the Devlin Report on commercial representation, prepared for the CBI and the chambers of commerce five years ago, and it was intended that such an organisation should embrace both the chambers and the CBI.

Talks to this end broke down because the different interests, personalities and operations of the two could not be brought together. The CBI, with a present membership of some 11,000 individual companies and nearly 200 trade and employers' associations covers concerns employing some 10m. workers.

While its strength is in its central national operations, the Association of Chambers of Commerce, covering about 50,000 companies, is based on the regional and local operations of its 89 affiliated chambers.

Merging the operations of these chambers with the central representative role of the CBI would, therefore, both boost the CBI's membership, and thus its finances, as well as giving it a grass-roots base for its work at seeing whether this is possible. The chambers would not like to see the CBI adopt the "business" title unilaterally so last month the association's national council passed a resolution calling for the talks.

However even if it did not prove possible to merge the association formally with the CBI, efforts might be made to recruit individual chambers into the CBI which might well then go ahead with its title change on its own.

The CBI's leaders' interest in this is illustrated by the fact that the word "business" was intentionally used in the title for the policy document which will be debated by the conference in two weeks and is entitled Britain means Business, 1977.

"The title 'Business' is being mooted here because of the expansion and change of the membership base of the CBI, irrespective of what Devlin may have proposed," Mr. Edward James, a deputy director general of the CBI said yesterday.

Earlier this year the Westminster Chamber of Commerce, which is not a member of the other chambers' national association, decided to join the CBI.

Journalists' closed shop 'a danger to freedom'

THERE CAN be no doubt that the majority of the parties involved in newspaper production are against closed shops in journalism, says the Newspaper Society.

The society, representing the publishers of the regional and local Press, makes the claim in a pamphlet on the subject, "The Fight for Freedom of Expression."

Of all those concerned in trying to draw up a Press Charter urged by the Government after its recognition that closed shops presented special difficulties in the newspaper industry

Big companies back rise in £

MAJOR COMPANIES surveyed by the London Chamber of Commerce and Industry would favour an upward movement in the sterling exchange rate which would make imports cheaper but exports dearer.

According to a paper prepared by Mr. Richard Bailey, the chamber's economic adviser, this view is not shared by medium-sized and small companies, however. This is especially true of those in engineering, who are concerned about export competitiveness, particularly while inflation remains at its present level.

Ford plans to take market top place

BY TERRY DODSWORTH, MOTOR INDUSTRY CORRESPONDENT

PLANS have been drawn up by Leyland, which may sink below Ford U.K. which set out a long-term target to take over British Leyland's position as market leader in Britain.

The plans are based on Ford's 109,000 cars last year, is reckoned to be manufacturing at only 50 per cent of its potential capacity. But it is planning to move to double-shift production at its Elmsmere Ford plant as the next decade. Ford is expected to take between 25 and 28 per cent this year.

All this expansion could be achieved by the better use of present production facilities combined with the development of assembly facilities at Dagenham. At the same time Ford will continue to top up its U.K. output with vehicles imported from its European plants.

Ford's plans, outlined to Henry Ford II when he visited Britain a few days ago for a review of the company's prospects, coincide with similar moves at Vauxhall, the U.K. subsidiary of General Motors.

Both companies are pushing ahead rapidly with their expansion plans to take advantage of the present weakness of British Leyland, decided to join the CBI.

Borthwick not up to hopes

By Adrienne Gleeson

THOMAS BORTHWICK, the meat wholesaler, next month will report profits for the year to the end of September well below City expectations.

The company's trading was badly affected during the final quarter of its financial year by labour troubles in its Australasian meat processing plant.

Dr. Bill Bullen, the chairman, said yesterday that it had been apparent from the beginning of the final quarter that these would have some effect on the figures for the year. But the full extent of the damage had not been apparent until the preliminary figures came in last week. "We are disappointed with the second half performance."

The effects of the Australasian labour troubles have been compounded by delays in making meat shipments to the U.S. This is simply a matter of timing, and the bunching, which left the U.S. contribution for the final quarter of last year very low, has meant that the contribution for the first quarter of this year is set to be correspondingly high.

However, in conjunction with the Australasian problem it appears to have pushed the company into the red in the final quarter of last year.

In consequence, profits for the full year are likely to fall about £2m. short of the £8.1m. pre-tax reported for 1976-77. This contrasts with City expectations of £10m. plus.

In addition to the big improvements in the contribution from its U.S. operations, the company now believes that its Australasian problems are on the way to a solution and that it may be possible to claw back some of the profits lost in the first half of the current year.

Dr. Bullen said that the company was satisfied with the performance of its U.K. interests, where two acquisitions—Methew Holdings and Freshbake Foods—are due to make a first-time contribution this year.

Borthwick went public in the middle of last year. Its offer for sale document then pointed out that profits in the meat trade were likely to be very volatile.

A broken Wilson — by Crossman

BY PHILIP RAWSTORNE

OPPOSITION from Cabinet as behaving with "an open mind" and Labour MPs to smoothness and diligence proposals for trade union legislation in 1969 almost reduced Sir Harold Wilson to "total disintegration."

This is the verdict of the late Richard Crossman, in the third volume of his diaries, published to-day, which covers the Labour Government's bitter internal arguments over "In Place of Strife."

Crossman says that after an anti-Wilson ferment had erupted in the Parliamentary Labour Party, he found in Prime Minister Harold Wilson a "frightened and unhappy, unsure of himself, needing his friends."

At a meeting at Downing Street, he found Sir Harold "punctured." He adds: "The great India rubber, unbreakable, now Lady Falkender, who was crumpled in his chair, injured, broken, his confidence gone, unhappy, wanting help."

Crossman concludes: "There is nothing left of him as a leader and a leftist. He is just a figure, a man without any drive except to stay in his Cabinet as long as he can."

With the support of only Mrs. Barbara Castle and, increasingly reluctantly, Mr. Roy Jenkins, Sir Harold was finally forced to abandon his legislative proposals at a Cabinet meeting in June.

Crossman records that it was "the most devastating" Cabinet meeting he had ever attended. Sir Harold "blatantly attacked his Cabinet colleagues, and his own giving this up because it is unpopular," Crossman records his ambivalence as saying: "You are soft, you're cowardly, you're lily-livered."

Mr. James Callaghan, then Home Secretary, then Foreign Secretary, is described as "a Cabinet opposition, is described as 'an arrogant young fellow' who 'was to his own advantage'."

Mr. John Stonehouse, a man whose comments were "the dangerous croak over which trustworthiness and above all trustworthiness."

The Diaries of a Prime Minister, Vol. III, 1969-70, published by Collins, £12.50.

Contracts given for trial coal combustion unit

BY KEVIN DONE

THE NATIONAL Coal Board has awarded the final round of major contracts for the £17m. international experimental coal combustion unit being built in Yorkshire.

The contracts worth £2.6m. include those for the major civil works and the instrumentation and control system for the experimental fluidised bed coal combustion facility under construction at Grimthorpe.

The £1m. contract for the civil works has gone to Miller Construction of Wakefield, and the £700,000 control system contract has been awarded to Babcock Controls. Head Wrightson has been given the contract for the fuel preparation and handling plant, valued at £900,000.

The £17m. project is being jointly funded under an international Energy Agency collaboration agreement by the U.K., the U.S. and West Germany.

The Grimthorpe project is intended to provide experimental facilities for work on combustion, heat transfer, gas clean-up, and energy recovery in a field, and the £700,000 control system contract has been awarded to Babcock Controls.

Co-operative wholesale sales rise 11.4%

FINANCIAL TIMES REPORTER

CO-OPERATIVE Wholesale Society sales went up by 11.4 per cent during the first six months of 1977 compared with the same period of last year. Despite a fall in living standards, an estimated 4 per cent, the Society saw sales figures rise to £816.5m.

Presenting the figures at the half-yearly shareholders meeting, Mr. W. H. Farrow, the Society's chairman, said it now seemed that we could expect to see an upturn in real consumer spending and hence in retail trading.

provided effective and control over wage increases maintained. "If this can be achieved," he added, "the long awaited goal of stable inflation will come into view."

He warned, however, that growth in the national retail trade would not be sufficient to improve Co-operative trading performance. A petition is currently being covered much lost ground and hence in retail trading.

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3 Executive Cabin. In most 747s, a special section in Economy is set aside for full fare passengers. It's a quiet area for business executives to work and relax, free from distractions like films (though audio headsets are available). You get early service of food and drinks and, as you're near the main exit door, early disembarkation. There's also a special selection of business publications.

4 The Business Package. This a flexible, sophisticated version of the money-saving package holiday concept. It uses British Airways scheduled flights and quality hotels. You'll be able to travel more often on the same budget: to make repeat trips, open up new markets, and get extra insights into world business. Special deals are built around trade fairs and exhibitions, and there are packages for incentive schemes, study tours — anything your business needs.

5 International Business Services. Here are just a few of the specialist services we offer the business traveller: full conference room, mail, telex and telephone facilities in eleven cities; Executive Currency Packs for tipping and taxis; your business card printed in Japanese; helicopter hire and Air Taxi service.

6 Conference Service. Use British Airways' vast international experience to match the facilities of the world to your special needs. We can help save you money travelling to an existing convention, or help you plan your own conference. For large or small groups, we can advise on cost-saving packages and ideal locations.

See your local Travel Agent or call us at 01-370 4255. British Airways has what it takes to give your company a keen competitive edge in international business.

British Airways

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Challenge to view on industry

THE VIEW that British industry is becoming dominated by a handful of huge companies is strongly questioned in a paper published to-day by Professor John Jewkes, until recently Professor of Economic Organisation at Oxford.

The paper, published by the Institute of Economic Affairs, casts doubts on the statistics which have been used to demonstrate the tendency towards concentration in British industry.

Professor Jewkes suggests that the share in manufacturing output accounted for by the 100 largest companies may be tending to stabilise at about 38 per cent.

He says government can do little to improve the structure of industry except to encourage competition and remove monopoly and other distorting influences. And he argues that the Monopolies Commission should limit itself to examining whether competition exists or not.

Delusions of Dominance
Robert Pomeroy, Institute of Economic Affairs, price £1.
Lombard, Page 2

Forex submits its case to Wilson inquiry

LONDON'S foreign exchange market has "a reputation for all round ability unequalled by any other centre." So say the foreign exchange dealers in the submission made by the Forex Association to the Wilson committee of investigation into U.K. financial institutions.

The dealers say that London's that they have caused difficulties for the pound in recent years by staging "bear raids." They say that such allegations are unjustified because close supervision by the Bank of England limits the size of dealers' short positions.

They are also unfair, in that they "fail to recognise the positive contribution made by the continuation of dealing services at a time of uncertainty."

The dealers say that London's reputation as a foreign exchange centre stems from its wide-ranging combination of specialist skills and from the fact that, while other money centres have attracted by publicity for some of their excesses, "London has kept its house in order."

COMPANY NOTICES

BANQUE FRANCAISE DU COMMERCE EXTERIEUR
US\$25,000,000
Floating Rate Notes due 1983 in accordance with the provisions of the above notes, the rate of interest has been fixed at 7 1/16 0/0 per annum for the semi-annual period ending April 27, 1978.
Interest due on such date will be payable upon surrender of coupon no. 3.
By Order of the Board
LUXEMBOURG SOCIETE ANONYME
TREVOR J. PEACOCK, Company Secretary

HANIMER CORPORATION
NOTICE IS HEREBY GIVEN that the twenty second Annual General Meeting of Hanimer Corporation Limited will be held at the company's office, Old Whitwater Road, Brooklands, Surrey, on Wednesday, November 16, 1977 at 3.30 p.m. after the adjournment.
A member entitled to attend and vote is entitled to elect a proxy to attend the meeting and on his behalf, to vote instead of the member. Where more than one proxy is appointed each proxy must be a duly authorised signatory of the member. Such proxy or proxies need not be members of the company.
By Order of the Board
S. FREEMAN, Company Secretary

ANNOUNCEMENTS
-OVERSEAS KERRAMAN SHILLIPS solicitors announce that with effect from 11.00 AM on Monday, November 13, 1977, the office of the firm will be held at 11, Mansfield Street, London W1P 9LH. The firm's present office at 79, New Cavendish Street, London W1P 9LH will be closed for business from 11.00 AM on Monday, November 13, 1977.

LEGAL NOTICES
THE COMPANIES ACT 1948
THE LONDON SCHOOL OF ACCOUNTANCY LIMITED
NOTICE IS HEREBY GIVEN pursuant to section 293 of the Companies Act 1948, that a Meeting of the Creditors of the above-named Company will be held at 22-24, Old Bailey, London, E.C.4 on Monday, the 13th day of November 1977, at 11.30 o'clock in the forenoon for the purposes mentioned in sections 294 and 295 of the said Act.
Dated this 27th day of October 1977
By Order of the Board
TREVOR J. PEACOCK, F.C.A. Secretary

THE THOMSON ORGANISATION LIMITED
NOTICE IS HEREBY GIVEN that the twenty second Annual General Meeting of Thomson Organisation Limited will be held at the company's office, 25, Abchurch Lane, London, E.C.4, on Wednesday, November 16, 1977 at 3.30 p.m. after the adjournment.
A member entitled to attend and vote is entitled to elect a proxy to attend the meeting and on his behalf, to vote instead of the member. Where more than one proxy is appointed each proxy must be a duly authorised signatory of the member. Such proxy or proxies need not be members of the company.
By Order of the Board
S. FREEMAN, Company Secretary

5% TREASURY LOAN SECURITIES
The 5% Treasury Loan Securities will be closed for one year on 31st October 1977. The securities will be redeemed on 31st October 1978, with the exception of one issue which will be redeemed on 31st October 1979. The securities are listed on the London Stock Exchange.
By Order of the Board
25th October 1977.

NOTICE OF PURCHASE
US\$100,000,000 Floating Rate Notes due 1983 in accordance with the provisions of the above notes, the rate of interest has been fixed at 7 1/16 0/0 per annum for the semi-annual period ending April 27, 1978.
Interest due on such date will be payable upon surrender of coupon no. 3.
By Order of the Board
LUXEMBOURG SOCIETE ANONYME
TREVOR J. PEACOCK, Company Secretary

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THE LONDON SCHOOL OF ACCOUNTANCY LIMITED
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A member entitled to attend and vote is entitled to elect a proxy to attend the meeting and on his behalf, to vote instead of the member. Where more than one proxy is appointed each proxy must be a duly authorised signatory of the member. Such proxy or proxies need not be members of the company.
By Order of the Board
S. FREEMAN, Company Secretary

CLASSIFIED ADVERTISEMENT RATES

	per line	single column	5 night column
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Appointments	3.50	11.50	40.00
Business & Investment Opportunities, Corporation Loans, Production Capacity	4.50	15.00	50.00
Education, Motors, Contracts and Tenders	3.50	11.50	40.00
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Book Publishers	3.50	11.50	40.00

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Businessman's Diary

U.K. TRADE FAIRS AND EXHIBITIONS

Date	Title	Venue
Current	Woodworking Ind. Exbn. (cl. Nov. 2)	Nat. Exbn. Centre, B'ham.
Current	Garden and Leisure Exbn. (cl. Nov. 2)	Nat. Exbn. Centre, B'ham.
Nov. 1-4	Plant Eng. and Maintenance Exbn. (cl. Nov. 4)	Nat. Exbn. Centre, B'ham.
Nov. 1-4	Institute of Housing Exhibition and Conference	Metropole Centre, Brighton
Nov. 6-8	Furniture Preview Show	Olympia
Nov. 7-11	Electric Components Exhibition	U.S. Trade Centre, W.1
Nov. 8-10	Computer Peripheral & Small Systems Ex. & Conf.	Wembley Conf. Centre
Nov. 10-20	Caravan Holiday Show	Earls Court
Nov. 13-17	Int. Domestic and Contract Textiles Exbn.	Nat. Exbn. Centre, B'ham.
Nov. 13-17	Int. Exbn. for the Food and Allied Industries	Olympia
Nov. 16-23	International Building and Construction Exhibition	Nat. Exbn. Centre, B'ham
Nov. 22-25	Video 77 Exhibition and Conference	Roehampton Hotel
Nov. 23-24	Assoc. of Industrial Development Officers Exbn.	West Centre Hotel, S.W.6
Nov. 23-Dec. 1	Printing and Graphics Equip. Exbn.	U.S. Trade Centre, W.1
Nov. 23-Dec. 2	Export '77: Services to Exporters	West Centre Hotel, S.W.6
Nov. 29-Dec. 2	Engineering Design Show	Olympia

OVERSEAS TRADE FAIRS AND EXHIBITIONS

Current	Title	Venue
Current	Tokyo Motor Show (cl. Nov. 9)	Tokyo
Current	Military Construction Exbn. (cl. Nov. 9)	Munich
Nov. 1-5	Electrical Engineering Exhibition	Berlin
Nov. 6-11	Int. Shop Fitting & Trade Equipment Exbn.	Paris
Nov. 16-27	Pacific International Trade Fair	Lima
Nov. 17-23	International Hotel and Catering Exhibition	Basle
Nov. 18-27	Int. Cycle and Motorcycle Exbn.	Milan
Nov. 22-26	Electronics Prod. Exbn. and Congress	Munich
Nov. 23-29	International Trade Fair for Textiles	Frankfurt
Nov. 24-Dec. 4	International Building Exhibition	Paris
Nov. 26-30	Middle East Health-Care Exbn. and Conf.	Dubai
Nov. 27-Dec. 11	1st Lagos International Trade Fair	Lagos
Nov. 29-Dec. 3	Int. Laboratory Exhibition	Paris

BUSINESS AND MANAGEMENT CONFERENCES

To-day	Title	Venue
To-day	Financial Times, International Chamber of Commerce European Business in World Development (cl. Nov. 1)	Café Royal, W.1
To-day	Lloyd's of London Press, Financing International Trade (cl. Nov. 1)	Royal Lancaster Hotel, W.2
To-day	Society of Motor Manufacturers and Traders, European Organisation for Quality Control Automotive Seminar (cl. Nov. 3)	Hilton Hotel, W.1
Nov. 1	Marchmont: Tax Strategy for Companies	Inn on the Park, W.1
Nov. 1	Inbucan Group: National Policy and Pay Restructuring	Dorchester Hotel, W.1
Nov. 1-2	Lenora: Cost Effective Print in Marketing	Inst. Marine Engineers, E.C.3
Nov. 2	Oyez: Company Pension Schemes	Inter-Continental Hotel, W.1
Nov. 2	Society of Pension Consultants: The Problems of Pension Schemes	Inter-Continental Hotel, W.1
Nov. 8	Stanford Research Institute: Decision Analysis	Grosvenor House, W.1
Nov. 8	Institute of Grocery Distribution: Energy—A Dilemma	Charing Cross Hotel, W.C.2
Nov. 8-10	The Review: Arab Insurance Conference 77	New London Conf. Cen., W.C.2
Nov. 9	Institute of Measurement and Control: The Measurement of Performance in Industry	London
Nov. 9	British Institute of Management: Effective Business Travel	Manchester
Nov. 9	CBM: Council of British Manufacturers of Petroleum Equipment: Bringing the Oil and Gas Ashore in 1978 and Onwards	Café Royal, W.1
Nov. 10	Association of Certified Accountants: Financial Modelling in Industry	Great Eastern Hotel, E.C.2
Nov. 10-11	World Trade Institute: Finance of Exports	World Trade Centre, E.1
Nov. 13-15	CEI: First National Conference	Conference Centre, Brighton
Nov. 13-18	Henley Centre for Forecasting: The Outlook for AIC: Employment Policies & Human Resources	South Croydon
Nov. 14-17	Institute of Acoustics: The Growing Problem of Noise and its Effect on the Environment	Wembley Conf. Centre
Nov. 15	London Chamber of Commerce: Small Firms: Making a Case for Finance	69 Cannon Street, E.C.4
Nov. 15-16	AMR International: Project Financing	Hyde Park Hotel, S.W.1
Nov. 16	Henley Centre for Forecasting: The Outlook for the U.K. Economy for 1978	Carlton Tower Hotel, S.W.1
Nov. 18	Institute of Credit Management: Export and Its Credit Risk	Bloomsbury Centre HIL, W.C.1
Nov. 23-24	Online: Small Business Systems	Regent Centre Hotel, W.1
Nov. 23-24	Financial Times: Price Policy and the Role of the Price Commission	Royal Lancaster Hotel, W.2
Nov. 24	British Council of Productivity: Added Value Finance or Long Term Solution	Hilton Hotel, W.1
Nov. 24	Construction Activity Research: Construction Activity at the Crossroads	Churchill Hotel, W.1
Nov. 25	European Study Conferences: The new Unfair Contract Terms Act	Sudbury House, E.C.1
Nov. 25-30	Shirley Inst.: Future of Natural Fibres	Manchester
Nov. 29-Dec. 1	Building Advisory Service: Handling Industrial Relations Today	Prince of Wales Hotel, W.8
Nov. 30	Stanford Hall Associates: Economic Forecasts for Company Planning 1977-1982	Carlton Tower, S.W.1

COMPANY MEETINGS

TO-DAY

11.30am: Anglo-Continental, 12, Cannon St. E.C.4

12.30pm: Anglo-Continental, 12, Cannon St. E.C.4

2.30pm: Anglo-Continental, 12, Cannon St. E.C.4

3.30pm: Anglo-Continental, 12, Cannon St. E.C.4

4.30pm: Anglo-Continental, 12, Cannon St. E.C.4

5.30pm: Anglo-Continental, 12, Cannon St. E.C.4

6.30pm: Anglo-Continental, 12, Cannon St. E.C.4

7.30pm: Anglo-Continental, 12, Cannon St. E.C.4

8.30pm: Anglo-Continental, 12, Cannon St. E.C.4

9.30pm: Anglo-Continental, 12, Cannon St. E.C.4

10.30pm: Anglo-Continental, 12, Cannon St. E.C.4

11.30pm: Anglo-Continental, 12, Cannon St. E.C.4

12.30am: Anglo-Continental, 12, Cannon St. E.C.4

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HOME NEWS

Putting the future to the vote

By JOHN LLOYD

QUICK GLANCE at the decline in productivity recorded in output per man-shift (OMS)...

OUTPUT AND PRODUCTIVITY, NATIONAL COAL BOARD, 1970-1977. Table with columns: Year, Deep-mined output (m. tons), Output per man year (tons), Output per manshift (tons), Manpower (thousands).

With such an apparently impressive record of success, why is the NCB pulled out all the way to get a "yes" vote in the ballot for its productivity deal?

NEWS ANALYSIS - COAL OUTPUT

Harsh

The first reason is that the 30-year overview conceals a harsh fact that productivity has been declining over the past 10 years.

NEWS ANALYSIS - COAL OUTPUT

In 1974, the coal industry was given a very substantial shot in the arm, after a decision to promote coal as a real alternative to oil.

national incentive scheme now on offer. The National Union of Mineworkers put it to ballot, and threw it out. The only "system" the NCB could offer was a national scheme, whereby if output went up nationally, all miners got a pro-rata increase.

Cause

According to NCB executives, the cause of falling output-per-man is not so much to do with machines (which are, after all, getting more sophisticated), but with the wage structure itself and the length of time one wage structure will last.

Nuclear workers claim 'limelight' increase

By IAN BREACH IN WINDSCALE

EMPLOYEES of British Nuclear Fuels claim that they should be paid more to compensate for the stress to which they say they and their families have been subjected because of public interest in the atomic industry.

The report is written by Stuart McDowell of St Andrews University, who was called in as arbitrator to settle the differences which remain after a seven-week strike at Windscale last spring.

More Home News on Page 35

logical pressures could be suffered, and had made their pay award for this reason, but rejected the larger claim of 30p to 30p as a concealed general wage demand.

The report adds some weight to remarks made last week by Mr. Louis Blom-Comper QC, who in a closing submission on behalf of the national Council for Civil Liberties, predicted that workers in the nuclear industry would be subjected to more and more stringent security vetting and surveillance.

BANQUE EXTERIEURE D'ALGERIE

Advertisement for Banque Exterieur d'Algerie, listing various international branches and services. Includes logos and contact information.

Minimum lending rate 'too low at 5%'

MINIMUM LENDING RATE is too low at 5 per cent, and will have to be raised if the monetary position is to remain under control, City stockbrokers L. Messel say in their latest Gilt Review.

FT GROCERY PRICES INDEX

Increase slows to 8.7%

By OUR CONSUMER AFFAIRS CORRESPONDENT

THE COST of the Financial Times grocery basket rose by just under 0.5 per cent in October to 257.9.

FINANCIAL TIMES SHOPPING BASKET OCTOBER 1977. Table with columns: Item, October, September.

INDEX: 257.98. 1971: Feb. 100; Mar. 101.09; April 102.73; May 105.15; June 108.00; July 107.24; Aug. 105.40; Sept. 105.26; Oct. 104.35; Nov. 105.48; Dec. 108.24.

goods could not be attributed to increases on any one single product in some shops, it was tinned rice pudding which had gone up, and in others canned fruit cocktail or peaches.

Our business is to help your business grow

In Wales.

Advertisement for Welsh Development Agency, featuring a map of Wales and text describing services for business expansion and financing in Wales.

Building and Civil Engineering

£2.1m. offices in Trinidad

ENTERING Enterprises, the company operating in Trinidad, has started work on a contract involving the construction of two office blocks at Port of Spain. The contract has been awarded by Armine Holdings. One of five-storey blocks, one of five-storey concrete frame construction. When completed in 1979, they will provide 20,000 square feet (1,846 sq metres) of office accommodation, part of which has been let for use by the Government of Trinidad.

Architects are Newell, Lewis and Bridge Associates, consulting engineers are LAB Engineering (Enco) and assistants are Spencer and

£2½m. restaurant and offices in Peterborough

TWO separate design and construction contracts are being undertaken by A. Monk and Co. at Eastfield, Peterborough. Together valued at over £2½m. they are for building a three-storey office block and a single-storey restaurant, each located either side of Vicarage Farm Road. The office block is 49.0 metres by 49.0 metres square with a 16.0 metres square central courtyard and is being constructed on piled foundations with reinforced precast and in-situ concrete frame. There are to be precast and in-situ concrete floors and roofs, brickwork with a dry

lining system for the external walls, and asphalt roofing. Layout of the building will be basically open plan, with three service cores, each containing staircases, toilets, storage and services ducts. Two of the cores will contain passenger lifts. The building, funded by Monk, is for occupation by Perkins Engines and it will be leased to it at the end of 1978. The recently started restaurant is a single-storey building, also for Perkins Engines. There are to be three separate dining areas with capacity for some 565 diners, as well as a major food preparation area.

£2.1m. job for Sunley

BERNARD Sunley & Sons has won a £2.1m. contract from Eagle Star Insurance Co. for the redevelopment of its site at 22, Arlington St., London, S.W.1. The contract calls for the construction of an office building and the refurbishment of the existing Georgian town house, parts of which were designed by William Kent, the 18th century architect. The reinforced concrete framed office block will have a basement, ground floor and five upper floors. The building will be fully air-conditioned, with external walls finished with West Healthy facing bricks and bronze aluminium double-glazed windows. Architects are Stone Toms and Partners and quantity surveyors Watkins Pool Partnership. Consulting engineers are Alan Marshall and Partners.

£1.4m. award to Wimpey

GEORGE WINPEY has been awarded a £1.4m. contract by the Property Services Agency for the construction of support facilities at RAF Alconbury, Huntingdon. The contract includes the construction of reinforced concrete of six buildings generally single-storey and totalling about 2,400 square metres. The work, which also includes ancillary ground works and drainage, is now under way and is due for completion in March, 1979.

In Cardiff Wimpey has won a contract from the Cwmbran Development Corporation, Gwent, for the erection of 14 factory units on the Springvale Industrial Estate, Cwmbran, at a value of almost £230,000. Work is just starting on this project, which comprises four blocks. Each factory is 143 square metres and of steel-framed construction with asbestos cladding to the wall and roof.

Water supply in Nigeria

D. BALFOUR and Sons and Edison Group and Partners, consulting engineers, joint venture associates in pollution control engineering in Nigeria, have been awarded contracts for the provision of water for seven towns in Borno State. Work has begun and the preliminary designs will be available by the end of November.

Contract documents will be available early in 1978 and construction will start in March, 1978. The work will involve water supply and distribution mains of substantial lengths, treatment plants, reservoirs, water tanks, pumps, generators and other ancillary equipment. Estimated cost of the first phase of this project is £3m.

Air compressor launched

CONSOLIDATED Pneumatic Tool Company announced last week a single stage air compressor which it claims represents a new concept in compressed air technology. Marketed as the C.P. Single Screw, the machine, at present available in two sizes of 140cfm and 185cfm achieves air compression by a single screw rotating between two rotating seals, known as "Roto-Seals". Unlike twin screw compressors, where pressure build-up on the mating faces imposes axial and radial forces on the bearings, says Consolidated Pneumatic, the single screw principle provides simultaneous compression on both sides giving balanced performance. The screw, described by the maker as the heart of the machine, has six grooves in which, at any one time, are engaged three or four teeth of each of the two Roto-Seals. In each compression cycle, air entering the inlet port is trapped in the chamber formed by the grooves, both and casing. Pressure is increased as the Roto-Seal teeth progress through the grooves of the rotating screw, reducing the volume available until the outlet port is uncovered and the air is discharged into

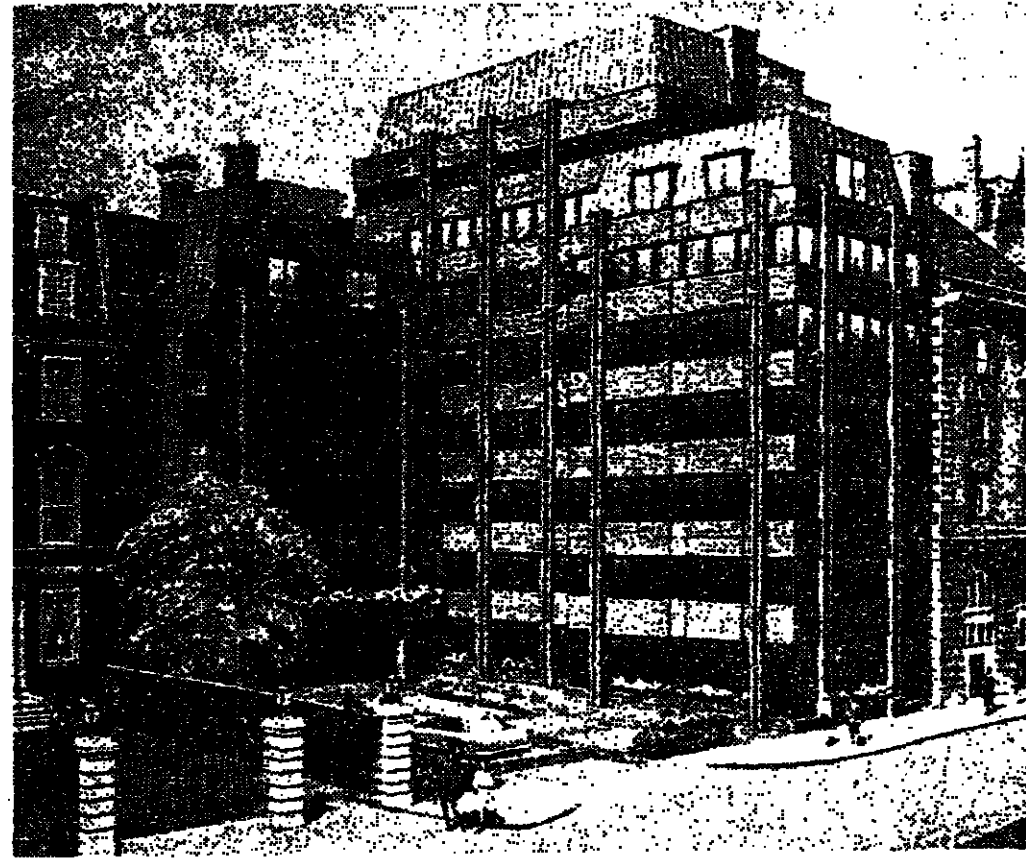
the receiver. Oil is circulated without the aid of an oil pump. Injected directly into the single screw groove, the oil seals and cools the air being compressed before being discharged with the air into the receiver where it is separated and recirculated through a cooler located alongside the engine radiator. Both compressors are available in silenced and unsilenced versions. In the case of the former, sound attenuating compartments fitted with coated foam cladding are provided at front and rear. This, the maker claims, reduces noise output to 75dB (A) at 7 metres without the need for silencing foam within the engine and compressor compartment. The engine selected initially to power the compressors is a Ford four-cylinder diesel. Other engine options are expected to be announced shortly. The machines are currently available mounted on a two-wheel chassis with draw-bar and over-run brakes or they may be supplied on skids or as a unit alone without undercarriage.

Venture in cooling towers

YANURA cooling towers, for applications in air conditioning, chemical, iron and steel, engineering, and refrigeration industries, are to be manufactured at Actair International's Cardiff headquarters and marketed in Europe, the Middle East and Africa. Actair towers for smaller applications are constructed on a one square metre module basis. Alternative combinations of modules and fan designs thus meet the requirements of most industries. Walls, water tanks and housings are generally constructed from galvanised steel sheet, which offers high resistance to corrosion and pollution. For applications where air and water pollution are excessive, the towers can be supplied in stainless steel.

Housing in Kent

WITHIN THE next four weeks, W. H. Wood (Hastings) is to start work on a £400,000 contract for 37 dwellings at Hopes Grove, High Halden, Kent. This contract, awarded by Ashford Borough Council together with another worth £157,945 awarded by Edenbeck Housing Society for a block of 15 flats in Foxgrove Road, Beckenham, Kent is the first following the company's recent decision to expand its activities. Special divisions are now operating to cover major construction projects, to undertake smaller jobs such as renovations and to provide a service for the development of leisure centres.



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£2m. awards to Wates

PRIVATE and public sector contracts together worth more than £2m. have been awarded to Wates Construction. At Huntingdon, Cambs., Wates will fit-out a new two-storey gross supermarket of nearly 30,000 square feet at a cost of £543,581. The contract covers all electrical and mechanical services for lifts, goods hoist and cold rooms and all shopfitting. The Village Trust at Bovingdean, Wiltshire has placed a £195,000 contract with the company to modernise 27 bungalows in Cedar Road, while a £540,000 contract from Walsall Metropolitan Borough covers the upgrading of 150 pre-war houses at Rough Hay, Darlaston. The same authority is also spending £184,188 with Wates on the construction of a hostel for 150 mentally ill in Narrow Lane, Walsall. Cannock Chase District Council has awarded Wates a £400,000 contract for Phase 3 of the town centre redevelopment at Church Street, Cannock and at Dudley, West Midlands a new 2,000 square metre health centre is due for completion in September next year under a £355,000 contract awarded by Dudley Area Health Authority.

Linking of sheet piles

BSP International Foundation has made an agreement to market W. A. Dawson's Easy-Pitch sheet pile. The device which interlocks sheet piles when they are being pitched in panels. This eliminates the need for a "top man" to carry out this hazardous operation, often at considerable heights and in windy or adverse conditions. All he has to do is stand, either on the ground or on temporary staging. Weighing 25 kg, the device is small and light enough for one man to operate and can be used to interlock all "Z" sections, certain "G" sections plus straight web piles. The ground release shackle is a sprung steel unit fitted with a spring loaded plunger enabling the pile lifting shackles to be released from ground level. It will accommodate all pile sections.

Suspended ceilings in tower block

CLARK AND FENN has been awarded a £1.2m. contract to install suspended ceilings and specialist plaster work at 180-metre high National Westminster Bank office block tower in Bishopsgate, London, E.C.2. The order is worth £1.2m. About 30,000 square metres of ceiling are to be installed on 42 main office floors of the building and will consist of mineral fibre plank spanning between rows of continuous light fittings. The work is scheduled to be completed in December 1978.

Reshaping office block

TROLLOPE and Colls has been awarded a contract believed to be worth about £1m. for the redevelopment of an existing ten-storey office block in Blagdon Road, New Malden, Surrey, for Central Commercial Properties—part of Ravenscroft Properties which is the principal subsidiary of The Land Securities Investment Trust. Architects for the redeveloped building, known as New Malden House, are the Huckle Tweedell Partnership. The building is to be supported on new bored pile foundations to the south and east wings and the remainder of the building is to be supported on existing reinforced concrete columns below second floor level. Following the demolition by another contractor of all floors

Camps in Nigeria

LESSEY Building Systems (Export) has won an order worth over £1m to supply 48 "Supacum" overseas accommodation units to Nigeria. This involves the design and construction of extensive falsework to support the new building. The work during is to be constructed in part over an existing supermarket and shops and connected to the existing staircase, lift and services core, left standing after demolition. When completed, New Malden House will consist of basement plant, ground floor office entrance, a first floor waiting room and offices from the second to the eighth floor. A plant room and lift motor room are to be located on the ninth floor.

Hydraulic excavators

TWO new excavators have been introduced by Massey-Ferguson for the U.K. market. They are the tracked MF350C and the wheeled MFV350C; they are fitted with a 3 cu. yd. (450 litres) bucket with the MF350C weighing 12 tons (11,800 kgs.) and the MFV350C 11 tons (10,900 kgs.). Both excavators have identical components and are fitted with the Perkins A4248 diesel engine rated at 70 hp at 2,000 rpm. The transmission is fully hydrostatic on these excavators with a two speed forward and two speed reverse mechanical gearbox fitted to the wheeled MFV350C giving speeds up to 11 mph (18 km ph).

Waterage work for Ilbury

ILBURY Construction has been awarded a £2.17m. contract by City of Bristol for the Avon Industrial Estate, stage 2A waterage works. The work will involve construction of about 2150 metres of 400 mm diameter water sewers varying from 2240 mm, to 255 mm diameter, 80 metres of 3050 mm diameter bituminous tunnel, 80 metres of 1050 mm diameter concrete pipe, 80 metres of 1050 mm diameter manholes and about 800 metres of roadworks forming the Avon Barracks Lane to Kings Lane. Work has started and is due to be completed in 80 weeks.

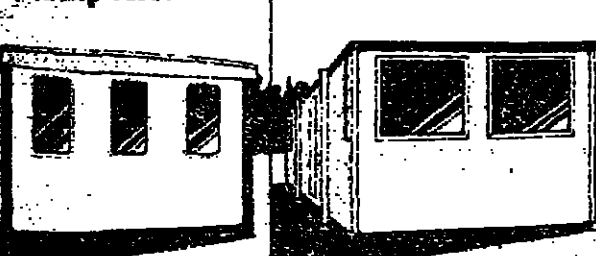
Shielding and dredging work

STAIN Civil Engineering has awarded a contract worth £100,000 by the Medway Ports Authority for further work at Gillingham, Kent. The latest contract covers the shielding of the roll-on roll-off pier and the improvement of the pier and fendering. This involves 10,000 cubic metres of concrete, 400 tons of sheet and piling with associated labour. Consultants for the project are Pavey and Partners.

IN BRIEF

Deere and Co. has been awarded a £280,000 contract by Lummas Company for chemical equipment to treat effluent from a paper mill. Work has started on a new growth store in Armagh, Northern Ireland. John Laine Construction won the £240,000 contract.

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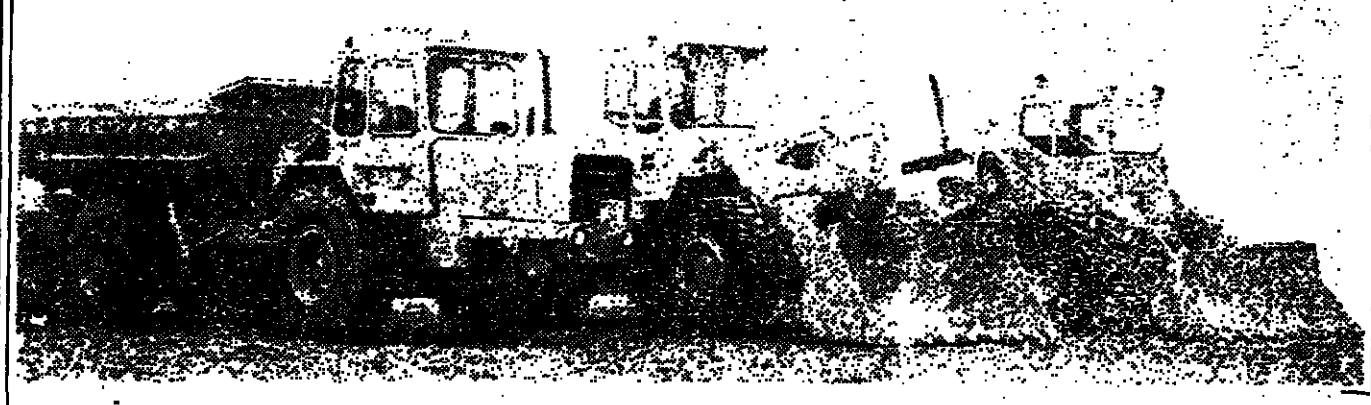
Description	Price	Telephone
8 BLOCK (400 mm) IN LINE, NONSLIP WIRE DRAWING MACHINE in excellent condition, 0.2000m variable speed 10 hp per block (1968).	P.O.A.	0902 42541/2/3 Telex 336414
24" DIAMETER HORIZONTAL BULL BLOCK by Farmer Norton (1972).	P.O.A.	0902 42541/2/3 Telex 336414
ROTARY SWAGING MACHINE by Farmer Norton (1972).	P.O.A.	0902 42541/2/3 Telex 336414
SLITTING LINE 500 mm x 3 mm	P.O.A.	
TWO 3 ton capacity SPEED FOUR HIGH ROLLING MILLS Ex. 6.50" wide razor blade-strip production.	P.O.A.	0902 42541/2/3 Telex 336414
MODERN USED ROLLING MILLS, wire rod and tube drawing plant—roll forming machines—slitting—flattening and cut-to-length lines—cold saws—presses—guillotines, etc.	P.O.A.	0902 42541/2/3 Telex 336414
1974 FULLY AUTOMATED COLD SAW by Noble & Lund with batch control.	P.O.A.	0902 42541/2/3 Telex 336414
1970 CUT-TO-LENGTH LINE max capacity 1000 mm x 2 mm x 7 tonne coil fully overhauled and in excellent condition.	P.O.A.	0902 42541/2/3 Telex 336414
1945 TREBLE DRAFT GRAVITY WIRE DRAWING machine by Farmer Norton 27"-29"-31" diameter drawblocks.	P.O.A.	0902 42541/2/3 Telex 336414
STRIP FLATTEN AND CUT-TO-LENGTH LINE by A.R.M. Max. capacity 750 mm x 3 mm.	P.O.A.	0902 42541/2/3 Telex 336414
1970 TWO STRAND WIRE FLATTENING AND STRIP ROLLING LINE variable speed 60 hp per stand.	P.O.A.	0902 42541/2/3 Telex 336414
1.15 DIE M54 WIRE DRAWING MACHINES 5.000 Ft./Min. with spoolers by Marshall Richards.	P.O.A.	0902 42541/2/3 Telex 336414
50 H.P. VERTICAL WIREDRAWING BLOCK x 650 mm dia.	P.O.A.	0902 42541/2/3 Telex 336414
9 ROLL FLATTENING MACHINE 1700 mm wide.	P.O.A.	0902 42541/2/3 Telex 336414
7 ROLL FLATTENING MACHINE 965 mm wide.	P.O.A.	0902 42541/2/3 Telex 336414
COLES MOBILE YARD-CRANE 6-ton capacity lattice jib.	P.O.A.	0902 42541/2/3 Telex 336414
BRONX & ROLL PRECISION TUBE AND BAR STRAIGHTENING MACHINE, variable speed type 6 or 3.	P.O.A.	0902 42541/2/3 Telex 336414
RWF TWO STRAND WIRE FLATTENING AND STRIP ROLLING LINE, 10" x 8" rolls x 75 HP per roll stand. Complete with edging rolls, turks head, flaking and fixed recoller, air gauging, etc.	P.O.A.	0902 42541/2/3 Telex 336414
Variable line speed 0.1750 ft./min and 0.1500 ft./min.	P.O.A.	0902 42541/2/3 Telex 336414

WANTED
 MODERN USED ROLLING MILLS, wire rod and tube drawing plant—roll forming machines—slitting—flattening and cut-to-length lines—cold saws—presses—guillotines, etc.
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The Executive's and Office World

EDITED BY CHRISTOPHER LORENZ

A practising architect appeals for better office design—in everyone's interest

What your building says about you

By Francis Duffy

AN office-building revival is on mistakes of the '60s have the horizon, and companies all been avoided. In any case, most over the country will soon be of the recent offices have been drawing up plans. Developers prestige buildings, designed and clients both have the oppor- with unusual care. Only when a 'unity' to create a quantum seller's market in office property jump in the quality and utility really returns, and new designs of mass office design. But they are again pouring off the draw- cing boards almost daily, will we sizers to dust off the old draw- know whether the general level ings they made during the Sixties property boom of the Sixties significantly. After all, the and early Seventies. This would occasional '60s office block was be a tragedy: for office workers a model of care and design, but as well as for the organisations this was the exception to a which employ them.

The average post-1960 British office block is profoundly depressing, both outside and in. It falls far short of its counterparts in New York or Stockholm. Even in Frankfurt, the notoriously ugly facades hide interiors which are carefully and ingeniously planned, with a proper regard to the comfort and efficiency of the users. In London, the uniform, drab and murky-coloured curtain-wall exteriors cloak an equally depressing prospect within: inefficient use of space in some areas, yet overcrowding in others; environmental conditions which veer between sweltering heat and Arctic blasts; quickly deteriorating services and finishes; not to mention noise, grubbiness and furniture which is either ill-chosen or worn-out, and often both.

Over the last few years, as office-building has slowed to a trickle, standards have risen. Not only have many recent exteriors taken more account of the surrounding townscape, but the facades are no longer invariably smooth and uniform. Inside, proper air-conditioning is now commonplace, standards of comfort have risen sharply, and overcrowding has been eased in some cases.

But not all the thoughtless

Pay prospects

How serious were the mistakes of the early '60s and early '70s? And were they of purely aesthetic significance, as many of their apologists claim? Several surveys in the U.S. and Europe have shown that most office workers rate such factors as pay and promotional prospects far more highly than the quality of their physical working environment. Given the choice, most would prefer an extra £500 a year to an additional 50 sq. ft. of floor space.

Indeed, if one follows the logic of Professor C. Northcote Parkinson, our messy and inadequate offices would be a positive expression of commercial vigour. "A perfection of planned layout is achieved only by institutions on the point of collapse," he argued in "Parkinson's Law."

This article argues that Parkinson is wrong; that office design is a mirror in which clients' overall management attitudes are reflected and magnified for all to read. Our dismal office buildings, with their glum interiors, reveal the weaknesses of the managers who both commission them and let their people work in them.

Take the problem of fitting people in, for example. Does every layman realise that the smooth continuity of those Sixties facades has been achieved by setting back columns so that they inevitably stand in the middle of rooms, casting deep shadows of uselessness around them—areas in which you cannot move or place furniture? Thousands of London office floors are pockmarked with such obtrusive columns, which only encourage overcrowding in the spaces which are usable. The smooth facades have been achieved at the expense of the users.

Equally far reaching is the decision which the architect makes about the distance of the central corridor from the facade. Many London offices have central rows of columns which mark an implicit corridor. This central position is often a poor compromise, leaving spaces on either side which are too deep to be useful single rooms, and not wide enough to arrange desks comfortably in open plan. It is hard adequately to describe the frustration to users caused by such lightweight architectural compromises—which are endowed by imperishable concrete with something approaching eternity.

Other, even more avoidable mistakes are just as maddening. Ceiling types are sometimes selected without any regard to whether they will prevent partitions from being moved by the user. Commonly used lighting patterns look wrong both in large and small rooms. Many window modules seem invariably to produce rooms which are too wide or too narrow. Any building manager knows these problems; even estate agents will ruefully admit to them after a couple of

drinks; but some architects who work for developers seem to lack the incentive to envisage their buildings in use. In every case, technology is available which would avoid such difficulties.

These little inefficiencies are cumulatively very wasteful. But they cannot rival for effect some of the more spectacular environmental deficiencies in London's office buildings of the sixties. On one side the glaring sun biases almost horizontally through vast areas of single glazing on November afternoons. Meanwhile freezing draughts chill the shady side.

These defects are all too well realised by users. That they are less well known is what is less well known is that they were studied extremely thoroughly in a Building Research Establishment survey 10 years ago—excellent in every respect except its impact on practice. A major conclusion was that new office buildings of the fifties and early sixties were inferior in environmental performance to the despised and stodgy monuments of the thirties.

Squint hard

The irony is that the style of these unlovely modern boxes was copied from New York. If you squint hard you might even think you are in Park Avenue. But London's glass towers are one third of the size, built with less care to detail, less usable, and above all they lack the environmental technology which makes such buildings bearable. They are sad and distant copies of a half-understood original.

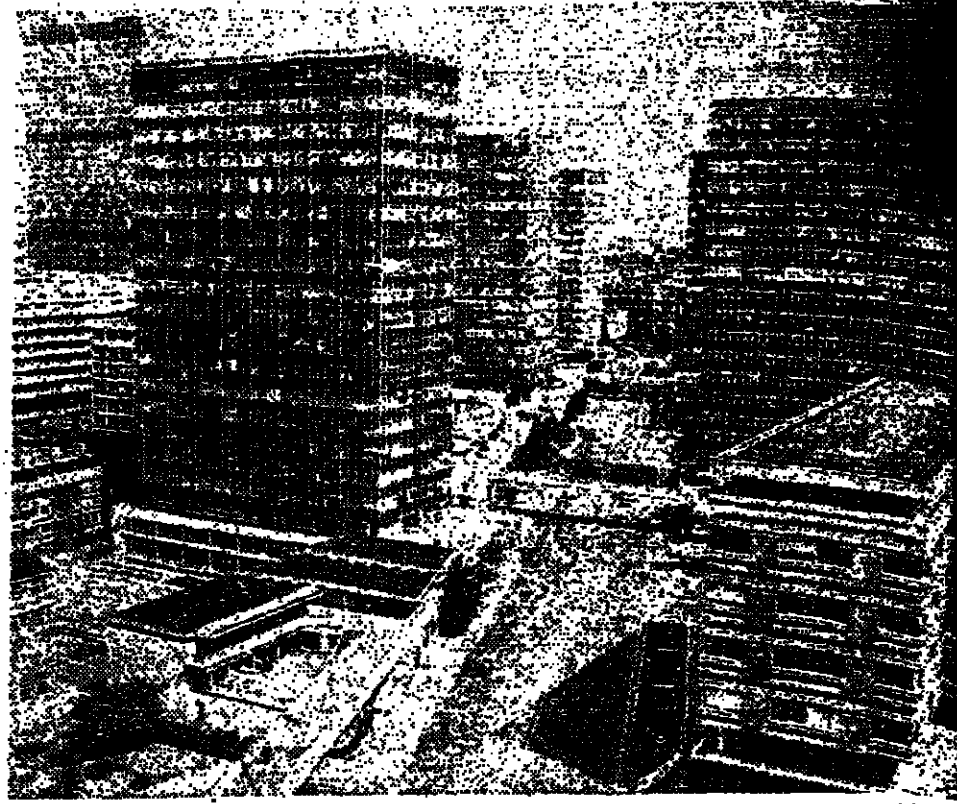
It is probably consistent with Parkinson's argument that perfection is death, that we should be prepared to pay more for the privilege of working in build-

ings which are grossly inadequate. Building costs for offices are no higher to-day in the U.S. than in Britain—in fact, the reverse. In New York an air conditioned, beautifully constructed office building shell will cost perhaps £28 to £34 per square foot to build. In London something less good but the best we can manage will start at £38 and could cost £38 per square foot. Standard interior fitting-out costs, excluding furniture, will be about £12 per square foot in New York. We would not expect to spend less in this country but there is no comparison between the quality of the results.

A history of high demand and choked and erratic supply means that our offices are extremely expensive to rent by New York standards. In London we commonly pay £10 to £12 per square foot; in New York to pay much over \$10 per square foot would be unusual—twice as much for space which is half as good. There is no danger of perfection yet.

New York's relatively low level of land and building costs is one of the reasons why its offices are so much better than the London average; the existence of a buyer's market for speculative offices on Manhattan is another factor. But none of this fully explains why we have become so used to grubbing after the second-rate—British clients could still get far better offices for the money they pay, if only they would insist on it.

Their reluctance to do so may stem partly from lack of design awareness. But, more important still, it is symptomatic of a more general reluctance to insist on high standards and efficiency throughout their organisations. Just look at those London offices. Their design short-



Familiar Sixties products: "Only when a sellers' market really returns . . . will we know whether general level of office design has improved significantly"

comings may be bad enough, but far worse is the way they are used—the one aspect where their occupants have direct control, and cannot blame the architects or the developers.

Take, for example, an entrance hall to a government building in which several able bodied men in crumpled grey jackets pass their days. One sits behind a desk round which, whether for modesty or to prevent the draught, is wrapped brown paper, artfully stuck with Sellotape. On the desk is a dog-eared notebook in which visitors' names are recorded. Usually a series of scrabbles through phone lists and two or three garbled calls succeeds in gaining access to the mysterious world above. This, incidentally, turns out to be relatively comfortable and well ordered. That entrance hall is not just poor design or slipshod administration. It is a statement about priorities broadcast loud and clear—"We don't have to sell

Overcrowding

Contrast this with an advertising agency which pushes every thing "up front" to impress and dazzle the visitor from the outside world. The right girl with the right smile is vital for modesty or to prevent the draught, is wrapped brown paper, artfully stuck with Sellotape. On the desk is a dog-eared notebook in which visitors' names are recorded. Usually a series of scrabbles through phone lists and two or three garbled calls succeeds in gaining access to the mysterious world above. This, incidentally, turns out to be relatively comfortable and well ordered. That entrance hall is not just poor design or slipshod administration. It is a statement about priorities broadcast loud and clear—"We don't have to sell

ourselves. What matters is not the outside world but ourselves." Contrast this with an advertising agency which pushes every thing "up front" to impress and dazzle the visitor from the outside world. The right girl with the right smile is vital for modesty or to prevent the draught, is wrapped brown paper, artfully stuck with Sellotape. On the desk is a dog-eared notebook in which visitors' names are recorded. Usually a series of scrabbles through phone lists and two or three garbled calls succeeds in gaining access to the mysterious world above. This, incidentally, turns out to be relatively comfortable and well ordered. That entrance hall is not just poor design or slipshod administration. It is a statement about priorities broadcast loud and clear—"We don't have to sell

State pensions—a case of heads the bureaucrats win and tails you lose

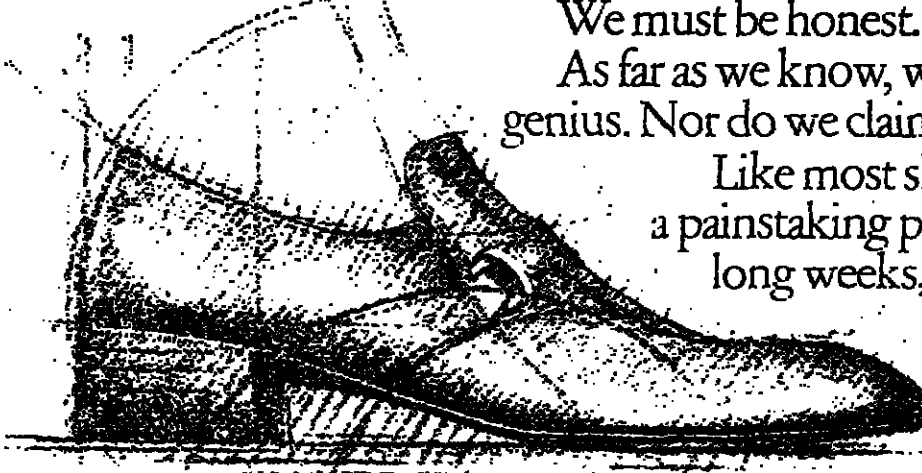
THE GOVERNMENT has at last announced a deadline for employers to make up their minds regarding the future of pension provision for their employees. It has decided that employers must submit their application, to contract-out to the Occupational Pensions Board by March 14, next year. Failure to do this could involve double payments. If they wish to contract-out of the State

scheme and provide the earnings-related pension by means of a company scheme then they will have to give their employees the legal three months notice of intent before submitting their application to the OPB. So they will have to tell their employees and their trade unions of the contracting-out decision by December 14—just over six weeks from now.

But this immediately poses a paradox. For the Social Security Pensions Act 1975, which set up the new State pension scheme and the contracting-out provision, states that if the employer intends his employees to remain in the state scheme, then he has to inform them of his decision by December 7. Yet if he does not apply to contract-out, then (two facts he is staying in the State scheme. At this stage, officials in the Department of Health and Social Security do not know the answer to their conflict in dates. But the impression is that, whatever the technical legal position, no action will be taken against employers who decide after December 7 to stay in.

At the time of submission, the employer and the trustees of the pension scheme conform with the special "Scheme Emergency Procedure". A lot of trouble will be avoided if the employer indicates unofficially to the OPB that he intends to contract-out and has given notice of intent to his employees. Then they can briefly check that the main legal requirements have been complied with.

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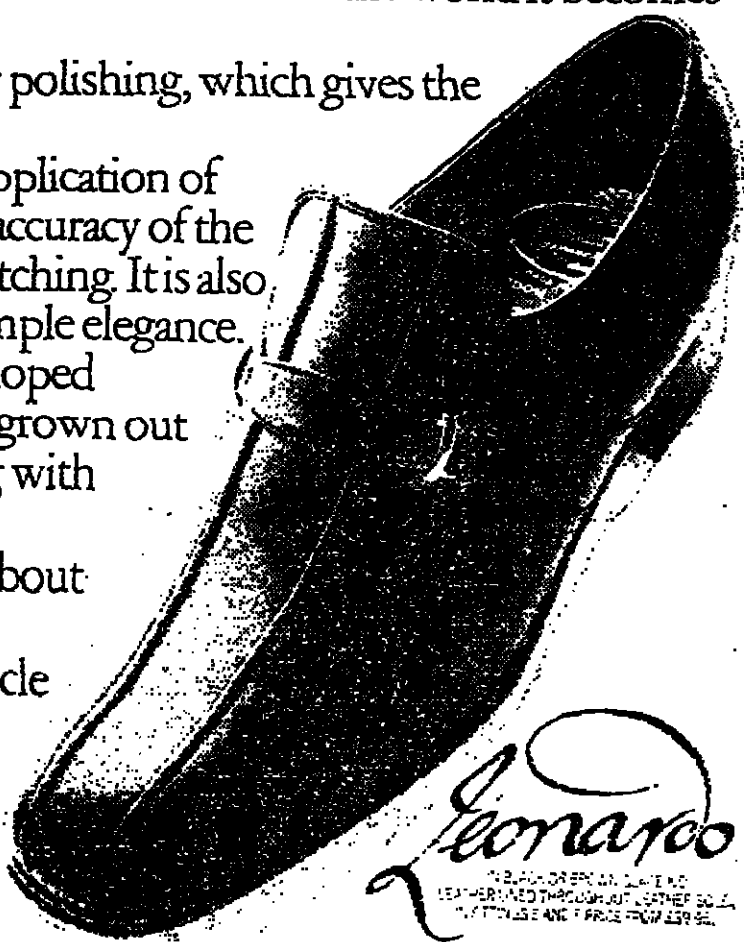
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In between is the obvious application of craftsmanship. You'll see it in the accuracy of the cutting and the precision of the stitching. It is also apparent in the classic lines and simple elegance.

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Leonardo

The calculator with the touch of genius

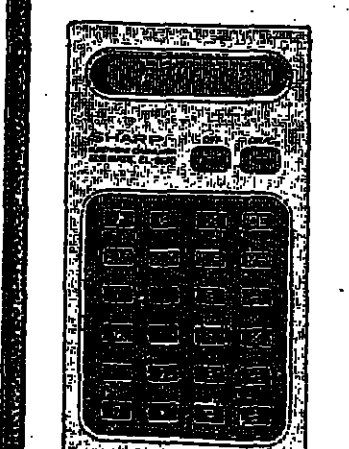
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The 'Pinger'



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Pelargoniums, says Mr. Wood, is the correct name for geraniums. And he should know. He has devoted the best part of his seventy-five years to pelargoniums. He loves them, passionately.

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He has developed no less than sixty entirely new varieties, written books on the subject and for his services to the cause has been made the Honorary Secretary of the British Pelargonium Society.

In addition he has what must be the most colourful garden in South London.

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FINANCIAL TIMES

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Monday October 31 1977

Why Canada is in trouble

CANADA habitually is a net fiation rate and that for wage importer of capital and settlements did come down to exporter of raw materials and about 8 per cent. Taken together energy. If something goes wrong with the devaluation that has with either flow payments gone some way towards restoring troubles result. That, in a nutshell, explains the decline of the Canadian dollar which has caused the Government to resort to a stand-by credit of \$US1.5bn. in the Euro market. It follows a running down of the official Canadian reserves this year from 4.9bn SDRs to 4.2bn SDRs at the end of August. The severity of the strains can be judged if it is realised that the money was spent not to hold the exchange rate, but merely to smooth out the bumps on the way down.

Nor should the stand-by be taken as a signal that the present rate against the U.S. dollar of U.S. cents 90.35, as against more than \$1.03 a year ago, will be defended. The market will be allowed its say, though in fact there is a fairly widespread opinion that the worst is over. As so often, the leads and lags have exaggerated trends, and the hardening of U.S. interest rates gave an added push.

The governor of the Bank of Canada, Mr. Gerald Bouey, did in fact say quite recently that the real surprise was not the weakness of the dollar, but its strength a year ago.

Energy deficit

Though the return of the Parti québécois Government in Quebec last November opened the trap door under the Canadian dollar, the real causes of its decline are related more to economic facts and considerations of economic policy. Three main elements stand out: the collapse of hopes that Canada would be self-sufficient in energy for years to come; the steep rise of wages in the mid-1970s; and the effect of Canadian economic nationalism on foreign investors, exacerbated by Quebec nationalism.

Because existing Canadian oil fields are past their peak, Canada must expect an energy deficit close to \$3bn. in 1982. That realisation has not, however, percolated to consumer level and altogether consumer confidence was euphoric well into 1975. It was then that the Government imposed wage and profit controls to shoot down inflationary expectations. The in-

Shoring up the grant

THE MOST important date in the ratepayers' calendar is now little more than a fortnight away. It is not one to which ratepayers normally pay much attention but it can have a decisive impact upon the amounts they will have to pay to their local town halls in the spring. For it is the day on which the Government announces details of the following year's rate support grant.

Jockeying

There are four key elements to this decision: the level of net local spending which the Government has accepted for grant aid; the overall percentage rate of grant; the cash ceiling for grant-borne cost increases next year; and the formula which will govern the distribution of the grant to local authorities. The first three elements indicate the relative toughness of the grant settlement. The general expectation is that next year's accepted net spending figure will be a shade lower in real terms than this year's; that the grant percentage will also be lower than this year's 61 per cent; and that the cash limit to the grant will be fully in accord with the Chancellor's thoughts about single figure inflation by the first half of next year.

However, it is the fourth element—the grant distribution formula—about which the local authority associations have become most anxious, as can be seen by the way in which this year they have conducted part of their traditionally private debate in public. A few years ago it was generally acknowledged that the distribution, much as the cities' expense. But a major effort has since been made to correct this, with the move over to a "unitary grant," result that the shires have seen their share of the needs imposed a cash limit on total spending. Both proposals 58 per cent. In 1974-75 to 53 per cent. This year, an effective decline of more than 8 per cent, while the metropolitan areas exist.

THE SPANISH ECONOMY

Senor Suarez tries to make a social contract

WHENEVER THE new long term interests to ensure Spanish Parliament con- that Government spending increases there are good-gearred more towards social humoured and bantering shouts welfare, that fiscal reform from the deputies of "keys, duces a more even distribution keys." The deputies are still so of wealth, and that Parliament unfamiliar with their Parli- mentary procedures that they keep forgetting special keys issued to unlock a tray by their seats giving access to the electronic vote-counting equipment. The Prime Minister, Sr. Adolfo Suarez, was himself caught out the other day. As Spain sets about establishing democratic structures so much new ground is being covered so quickly that no one ever is quite sure how things should—or will—work.

The learning process has so far been confined primarily to the more obvious political reforms as the political structure of the Franco regime is dismantled. The agreement between the Government and the opposition on a form of Social Contract to hold down wages and curb inflation has thrown the spotlight on to the economy. Two years after Gen. Franco's death, it is the first formal attempt to dismantle the economic structures that were so intimately allied with his regime. The years of high growth and artificial protection, the feather-bedding of management, and the repression of social trade unions provided no experience of how to deal with high inflation, depressed domestic demand, or of how to come to terms with less protectionism, greater accountability of public enterprises, and with trade union rights.

It is an odd situation for the world's tenth industrial power to find itself in. The Government is seeking to carry out not only important short-term measures to reduce inflation and cut the payments deficit, but also major structural reforms on a scale which, if carried through, would have few parallels in western economies. In every sense it is a venture into the unknown. For the moment both the Government and the opposition Socialist and Communist parties seem anxious to hold each other's hands for mutual comfort. They need each other, and will probably do so at least until the economic measures begin to take effect.

The Social Contract is a complex piece of horse trading to be seen against the broader backdrop of political reforms—labelled by the Press and the politicians as the *compromiso colectivo*. However, the essence is simple. Sr. Suarez has been able to sell wage restraint to the opposition in return for guarantees that he will dismantle the economic system that sustained the Communist and Socialist and Communist have taken a risky, though understandable, decision based on the calculation that it is in their



Prime Minister Suarez (centre) flanked by Communist leader Santiago Carrillo (left) and Felipe Gonzalez of the Socialist Party: pressure from the militants.

its subsidiaries' management. INI directly and indirectly controls companies which account for 10 per cent of Spanish industrial output.

All this implies the acceptance of two principles. First the main economic beneficiaries of the Franco regime were the upper and middle classes which must now permit more elbow room to their fellow countrymen. Secondly the economy must be made more efficient and brought into line with the models of other European countries if Spain is to become a member of the Common Market. In particular management and technical skills must be overhauled. To that end Sr. Suarez may well be willing to see a number of badly managed companies go to the wall.

There is general agreement that the current economic problems stem from a failure to react to the increased cost of energy imports since 1973. The drop of demand and the dull growth of the past 18 months is in many respects a delayed symptom of what other industrial countries experienced in 1974. For instance, sharply increased overheads and slack home demand have begun to squeeze a number of base industries like steel, shipbuilding, and certain sectors of the automotive industry. The house and banks are alive with rumours of well known companies in financial difficulties. On the other hand demand for consumer products is still strong.

Some indicators have performed positively. For instance the reserves increased in August by \$908m, causing total foreign reserves to recover to \$5.37bn. There was an 11 per cent increase of the number of tourists visiting Spain in the

first nine months. The energy import bill this year encourages controls companies which account for 10 per cent of Spanish industrial output. The energy bill does not yet reflect the impact of the 20 per cent devaluation in July. Nor is there any hope that the 26 per cent share of energy in imports can be reduced in the short term, even though the economic package includes more nuclear power stations (probably four) and more use of coal.

There are those who feel that the measures themselves are not sufficiently draconian to cut the payments deficit from some \$3.5bn. this year to the hoped-for balance by 1978. Moreover on the wages side the original government suggestion was a 15 to 17 per cent ceiling, considerably below what was eventually agreed.

A great deal depends upon wage rises being kept within the prescribed limits. The Government has felt obliged already to concede a 21 per cent increase to civil servants, barely coming in by the norm, for the coming year. Some employers are already saying that they will have no option but to give way to higher demands. The sole sanction against employers for breaking the norm is the threat to withdraw official credit. That is unlikely to have much practical weight since most credit comes from the commer-

cial banks, those companies with access to official credit are in general the ones least able to afford substantial wage increases. There is a loophole in the pay code: employers may dismiss up to 5 per cent of the labour force if industrial action wrings from them an increase above the norm.

In the last resort the success of this economic policy depends upon the threat of increased unemployment. Unemployment is now reliably believed to have passed the 1m. mark, and according to the Communist-controlled Confederation of Workers' Commissions comes to 1.4m., the areas worst affected being in the South. That is equivalent to between 11 and 15 per cent of the work force, but perhaps slightly misleading since a proportion do have second "unofficial" jobs. Nevertheless it is very high for an industrialized country.

The Social Contract entails no commitment to provide new jobs or provide assistance to hard hit areas. There merely are palliatives like higher unemployment benefits. For instance 60 per cent of the social security budget of \$720m. will be earmarked for unemployment benefit. Extractors will have up to 50 per cent of their social security contributions reimbursed for every new job created. Meanwhile the Government has resisted any tightening of the employment regulations which last year were relaxed to free employers from the strict hire and fire laws that had been Gen. Franco's way of buying peace from labour. Indeed it seems that both the Government and the Socialist and Communist opposition have concluded that little can be done about unemployment which, if anything, will become grunted supporters of a former dictator.

Distribution of wealth

The tax system will be restructured to create a more even distribution of wealth with higher relief for lower income groups and the imposition of wealth and gifts taxes. Banks for the first time will be obliged to forgo their secrecy and assist the tax inspectors. More important, an enquiry is to be made into the banking system, one of the most distinctive features of Franco's Spain. On a conservative estimate the banks have built up a 40 per cent control of Spanish industry and are often in the position of being both shareholders and financiers to the same companies. They are a law unto themselves jealously guarding their privileges and monopolies, fighting any liberalisation of interest rates, and of the rules governing the activities of foreign banks.

Tied in with this there are commitments undertaken by Sr. Suarez to make public enterprises properly accountable to Parliament. The state holding company, INI, has until now kept its own books and preserved its independence so that there has been no way of checking the quality of its own and

MEN AND MATTERS

A big day for Father Michael?

A shy and studious Jesuit priest Father Michael McGrell, seems set to step forward at an August gathering in Chatham House, London next week to receive the first Ewart-Biggs Memorial Prize for £1,500. This award, conceived out of the shock following the ambassador's murder by the IRA last year, is to be given for literary works furthering Anglo-Irish understanding. Curiously enough, McGrell's success is substantially due to an uproar caused by Dr. Conor Cruise O'Brien.

As an extra twist, the former Irish Cabinet Minister will not be delivering the ceremony a Dublin, while the organisers insisted the neutral ground of Chatham House in London. When the row over his Oxford speech finally died down, the trustees apparently decided to withdraw the invitation for fear that O'Brien would seize the chance to stir up another political controversy.

Message delayed

In the long Scandinavian nights, the Norwegian temperance lobby is nursing a disappointment. It had hoped that by this Christmas all bottles of spirits through the book was getting invaluable publicity (delegates later queued to buy it at £10 a copy from the "bagman" McGrell happened to have brought with him). O'Brien's conclusions were almost diametrically opposite to those expounded in it.

For all that, there was a sudden realisation that McGrell had produced a significant study of Irish political attitudes. This came at a key moment in the search for the Ewart-Biggs Memorial prizewinner. The front runner until then was a newly-published and much acclaimed biography of Parnell by Professor E. S. L. Lyons, the Provost of Trinity College, who

Face-saver

Seen on a Winchester-bound train last Thursday, a public schoolboy studying a copy of Virgil's Aeneid which was ostentatiously enclosed in the book jacket from an edition of The Kama Sutra.

Two assistant editors, Walid el Hage, and Abdul Ghanim Mroueh. In the C category there are two substantial shareholders in Mahmoud Sharif, a Palestinian who formerly ran Qatar's information department but is now an editor in Amman, and Omar Zawawi, a prominent Muscat merchant. Also on the Board is R. C. Ashworth, former colonial servant and British diplomat who was in charge of information and propaganda in Aden, Hong Kong and then the Middle East and now performs the same function for the Sultan of Oman. Rayyes says the demise of the Lebanon as a news centre, not the least because of censorship, has made An Manar necessary. He declares that it will never be subject to "patronage." The first edition started with a "scoop" identifying "Captain Mahmoud," hijacker of the Luftansa plane last month as the assassin of Abdulla al Hajri, the former North Yemen Premier, gunned down in a London street in April. Rayyes promises many more news-breaks. Initially, An Manar is being run off on the machinery of the Evening Post. Reading, by web offset. The plan is, however, to establish its own fully-integrated computer-setting operation in Arabic in London. In one vital respect, Rayyes may have the laugh on the big Fleet Street proprietors. The printing unions concerned, he assures me, are co-operating wonderfully with the introduction of new technology.

At a Press conference in London to mark the launching of An Manar, a weekly Arabic-language newspaper, the British journalists present failed to elicit the fact that they will be very represented on the Board by

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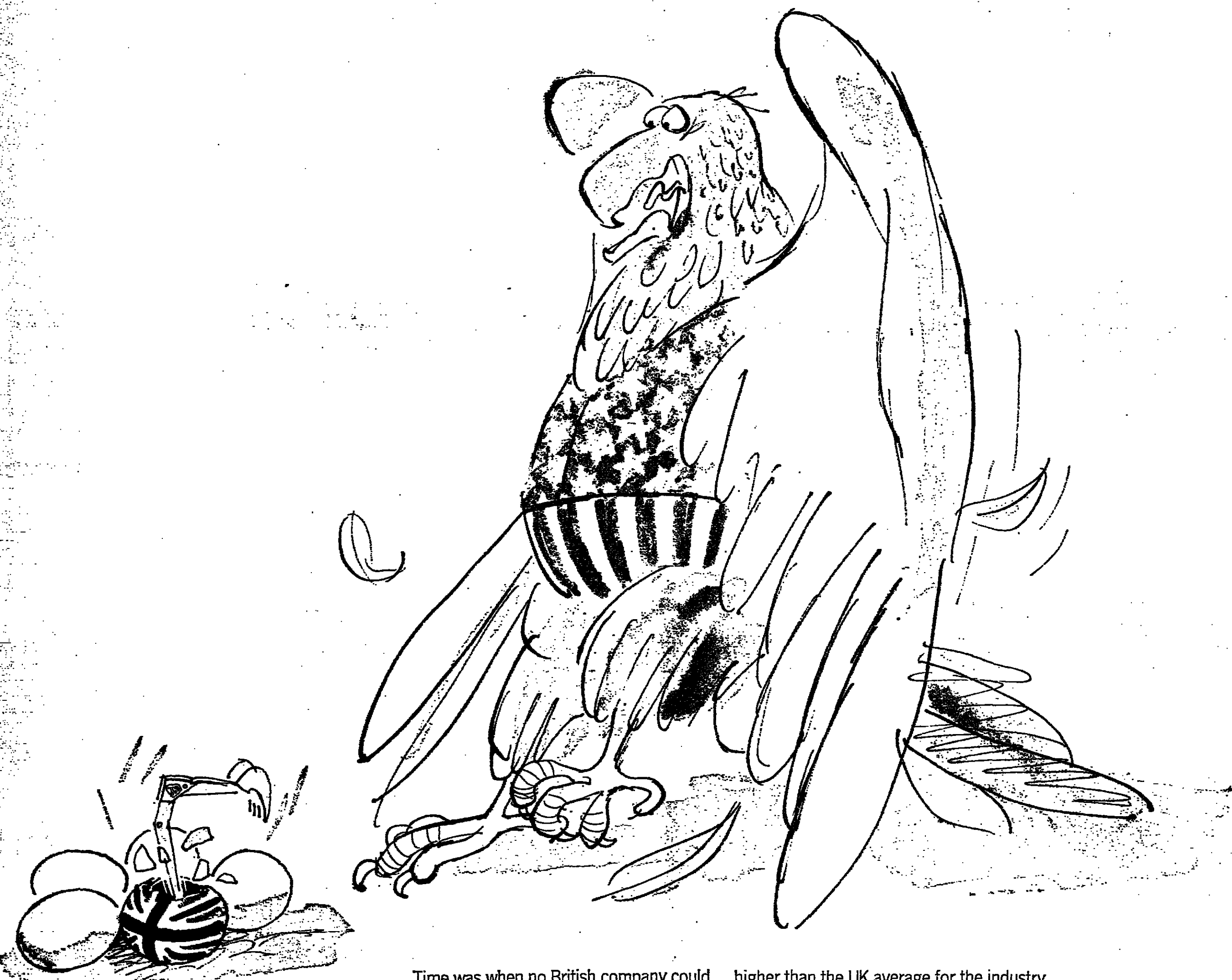
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FINANCIAL TIMES SURVEY

Monday October 31 1977

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CONSTRUCTION PLANT II

Although small by comparison with some of its American competitors, the British-owned construction equipment sector appears to be in good health — but there are long term questions about its ability to gain a larger share of world markets.

Adequate scope for growth

IF BRITAIN IS to take advantage of the benefits that North Sea oil will bring, and revitalise her industrial base, the construction equipment business will be among those industries on which that revival will depend. Not only is it already a successful industry, but it is one of the products of which there will be a continuing demand in the foreseeable future.

The world's population is still growing, there is increasing urbanisation and rising living standards which bring with them the need for housing, roads, utilities and other infrastructures. Some estimates suggest there will be an 8 per cent a year real growth in demand for construction equipment world wide to \$US.20bn. by 1985.

Not everybody in the industry agrees with the idea that mergers among the British companies are necessary. They point out that even if the three biggest businesses were merged, they would still be dwarfed by Caterpillar and Komatsu. J. C. for by Colver Cranes, making Bamford Excavators, the JCB group, aims for a turnover of £95m. this year. British Leyland's Special Products' construction equipment division (Aveling-Barford, Aveling Marshall Goodwin Barsby and Bamfords of Belton) hopes for £61m. while the Babcock and Wilcox companies (Blaw Knox, Winget and Muir-Hill) should top last year's £36m.

One could include Powell Duffryn's Hymac subsidiary and Acrow's Priestman offshoot and that would still leave a big gap between the British and Caterpillar's £3bn. turnover or Komatsu's £765m. of which 74.5 per cent — £568m. — was accounted for by construction equipment sales.

The practical problems of putting any of the companies together are considerable. JCB is a private company. The Leyland companies are owned by the National Enterprise Board and could be described as the "nationalised" part of the industry. Babcock and Wilcox is a public company.

JCB appears to be in the market for an acquisition, should the right one come along. It would undoubtedly be towards the head of the queue if the NEB decided to sell off Aveling-Barford and its other construction equipment companies. JCB came close to making a counter offer for Aveling-Barford in 1967 at the time of the Leyland bid and has not changed its opinion that the two companies would fit well together.

JCB would also like to move into concrete mixes and dumpers trucks although the most obvious takeover candidates are not for sale. The fact that JCB is interested, however, shows that it seems to want to move downwards in the size of equipment it offers, remaining, so to speak, a producer of "bread-and-butter" machines.

THE STATE of the domestic market for construction equipment can in the short term give rise to little optimism among British manufacturers, but ex-years have created considerable problems, although in the medium term the oil-producing countries will continue their rapid rate of expansion to build up an industrial infrastructure of roads, airports and other civil engineering projects.

Sales

According to the latest, updated Department of Industry statistics, the industry's sales at current prices last year totalled £826m. made up of £729m. for construction equipment and £97m. for mobile cranes. Exports increased by 30 per cent to £663m. (of which £575m. was construction equipment and £88m. mobile cranes).

Imports at £340m. (£216m. construction equipment and £124m. mobile cranes) also rose by 30 per cent. And given that the U.K. market sales were worth, according to the Department of Industry, £403m. (£370m. construction equipment and £33m. mobile cranes) this means imports accounted for more of the home market than did the U.K. producers.

Once NEDO had highlighted these statistics, the U.K.-owned companies started thinking again about the possibilities of restructuring the industry in a way which might produce the kind of large-scale construction equipment business that gets closer to matching the Americans and Japanese in both the research and development market. The problem mainly facilities necessary to develop from the fact that some such a range.

THE world construction equipment industry is dominated by the North American based international groups, many of which operate through subsidiaries in Britain, and by the Japanese, particularly the powerful Komatsu group. The extent of foreign participation in Britain is shown by the fact that U.S. subsidiaries account for about half the home market sales and half of the exports.

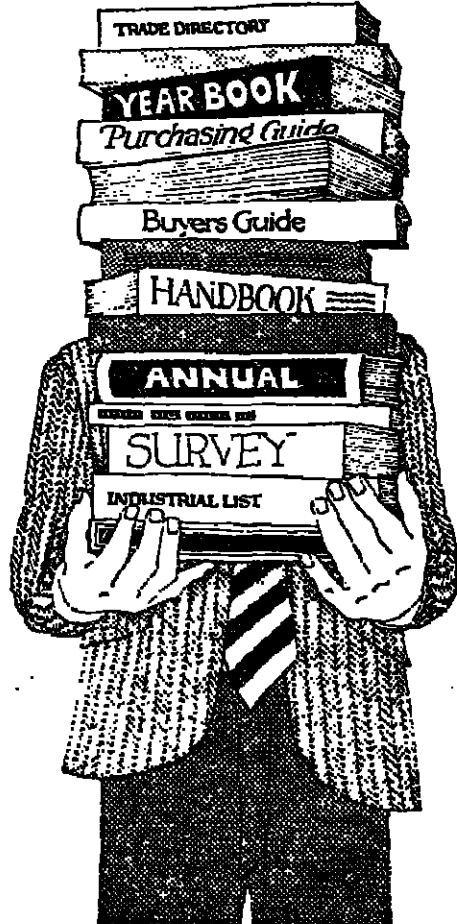
According to the Federation of Manufacturers of Construction Equipment and Cranes, the industry exported goods worth £575m. last year compared with £470m. in 1975, and so far this year the rate of increase is even higher. It is estimated that exports during the first half are amounting to £350m., although this figure is unlikely to be doubled by the year-end because demand has recently slackened off.

Despite this increase in value terms (distorted by inflation) the performance of the British industry in world markets has not been encouraging in recent years, having fallen from being the second largest producer in the West before 1968 to its present position behind the U.S. and Japan. Between 1963 and 1971 Britain's share of the world market for construction and mining equipment decreased from 20 per cent to 14 per cent, and is thought to stand at around 10 per cent to-day.

Nevertheless, if the industry can only hold this share the export prospects are good, with current thinking on world growth in demand putting it at around 8 per cent annually. It is reckoned that 1985 world spending will be up to \$20bn.

Buyers in terms of markets British companies last year sold £300m. of equipment to the top 20 customer countries, led somewhat surprisingly by France, which has clearly re-exported a large proportion of this. Two oil-rich developing countries, Saudi Arabia and Nigeria, followed as the next most active buyers, while other EEC countries, particularly the Netherlands, were strong customers.

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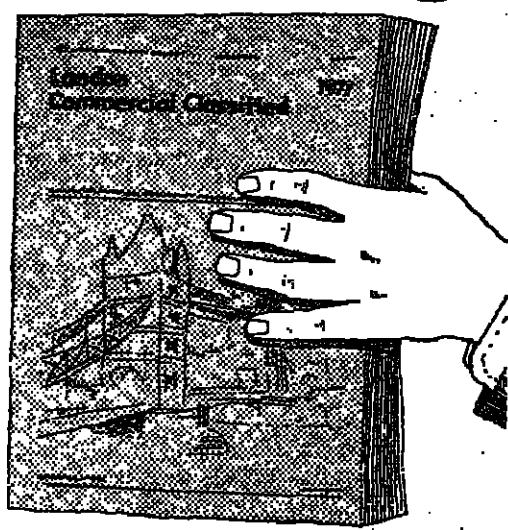
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Plentiful export opportunities

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However illustrating the problems British companies face, it points out that the international scene for earthmoving equipment is dominated by Caterpillar and Komatsu with over 40 per cent of the world market. The report says that the sector exports about 87 per cent of its output; an increasing share of world trade depend on action taken to broaden its expansion plans. It also pinpoints some of the problems faced by exporters, such as non-tariff barriers into Europe, and alleged shortcomings of the Export Credits Guarantee Department.

It is claimed that ECGD terms for performance bonds and inflation insurance are not competitive and that the department will not finance shipments to an overseas distributor unless made against a firm order. It is suggested that if ECGD in Brazil at least that these may finance could be made available

It is clear that both these companies have already realised the conclusions voiced in the NEDO report and acted accordingly, but smaller concerns in the U.K., without the resources to invest, are likely to remain at a disadvantage when competing with big foreign companies.

There has been a NEDO marketing survey recently, involving interviews with more than 40 U.K. companies designed, in part, to let British-owned companies know their ideas on the opportunities overseas and the problems in tackling them. Many of them certainly seem reluctant to stump up the cash needed to support international marketing operations on a proper scale.

There is overcapacity in the industry. The scope of what is required can be judged by the Blackwood Rodge balance-sheet. This group, the largest distributor of construction equipment in the world, last year had an inventory of £114m. to support international sales of £250m. But the British companies are suffering severely and finding it difficult because the custom is so high valued. In France the market is for the customer (usually a distributor or financial crisis at Poclair, dealer) the full amount with his order and the cheque is cleared as his concerns and the Americans, in the form of J. I. Case, have been allowed to acquire 40 per cent of the company.

Largest

Currently the U.K. industry is working at only 80 per cent of capacity but it is in good shape compared with West Germany where many local manufacturers are in the deepest of financial trouble.

In Sweden the construction equipment makers are also suffering severely and finding it difficult because the custom is so high valued. In France the market is for the customer (usually a distributor or financial crisis at Poclair, dealer) the full amount with his order and the cheque is cleared as his concerns and the Americans, in the form of J. I. Case, have been allowed to acquire 40 per cent of the company.

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Kenneth Good Industrial Correspondent

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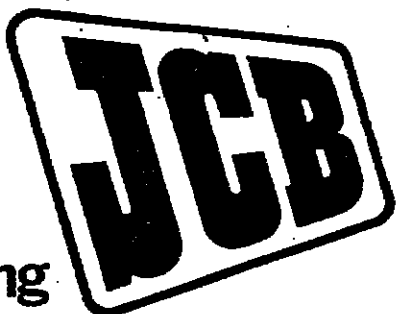
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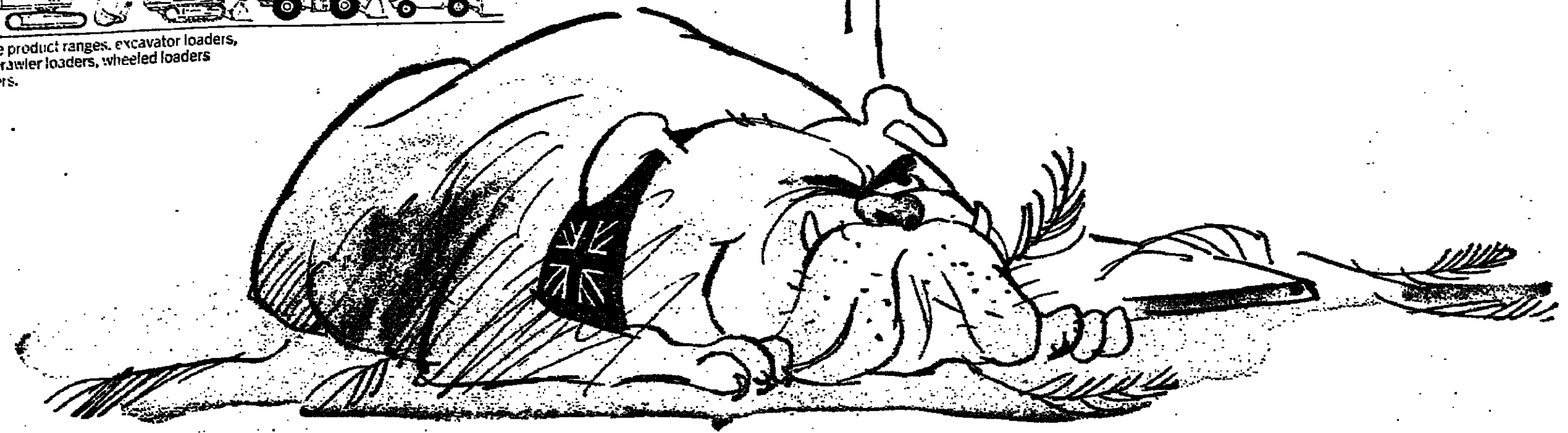


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CONSTRUCTION PLANT IV

Looking to the future

CONSTRUCTION EQUIPMENT and the INDUSTRIAL STRATEGY

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NEXT FRIDAY Mr. Eric Varley, the Secretary of State for Industry, will attend a seminar at which the construction equipment and mobile cranes sector working party, set up at the National Economic Development Office as part of the industrial strategy programme, will report to the industry about the work it has completed during the past year.

There will be two main topics on the agenda: first a review of an overseas marketing strategy simply called "The importance of productivity."

For anyone who still wonders what the industrial strategy programme is all about, this seminar will provide a useful insight to the work which has been going on. As far as the construction equipment industry is concerned, management, unions and Government are considering, in a realistic and positive way, what the industry might do to make a good performance even better.

For example, it was agreed that the working party should sponsor a study of international market opportunities and the way they might be exploited because, in spite of the strenuous export efforts of some companies, the U.K.'s share of world trade has been slipping steadily for the past 15 years.

The Inbun research group was called in to test the marketing strengths and weaknesses of the U.K. manufacturers and put them in a European context. About 40 U.K. companies were interviewed and asked which overseas markets they consider to have the most potential and about the problems they have experienced so far in tackling those markets.

Then some ten companies in West Germany, France and Sweden were asked similar questions. The investigation was restricted to Europe because the sector working party wanted a quick assessment of the way overseas markets might develop and the way European countries with similarities to the U.K. viewed the situation.

In any case Continental companies have in the past tended to put a greater emphasis on export than their U.K. counterparts. The West German construction equipment industry, for example, has the capacity to fulfil expected demand in both home and overseas markets.

Many British companies however can cope with only one or the other. In times of peak demand they have tended to switch back to supplying the home market at the expense of exports.

Friday's discussion on the marketing investigation will centre around two inter-related problems:

(1) The financial and physical resources the U.K.-owned construction equipment groups require to get into new markets and;

(2) How these resources might be obtained.

It is acknowledged that it would be a major step for some of the U.K. companies to tackle new markets. Setting up stocks of machines and parts together with a servicing back-up is an expensive business. The sector working party knows the problems and of the possible need for some kind of financial backing for would-be exporters.

The companies' view on this particular point has been expressed by one of the working party members, Mr. Peter Capel, a director of JCB. "The industry is not looking to the government to take all the risk out of the business. But if the government wants the companies to distribute their equipment around the world, the government should make some provisions to enable us to do just that."

In this context, the industry naturally turns in the direction of the Export Credits Guarantee Department to see how its services might be tailored to fit more neatly. To start with some companies would be prepared to pay the necessary premium if only the ECGD could offer "commercial risk" cover, something it cannot do at the moment.

Then a major bone of contention is the fact that the ECGD can only provide cover against an invoice from a customer, not from a distributor. In the construction equipment industry the distributors are the principal customers. The companies also maintain that there must be a way of providing some ECGD cover for inventories, so essential in supporting any overseas sales effort.

But it is obvious that even

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Increasing scope for union activity

THE LABOUR pool for the plant hire and manufacturing industry operates in a highly structured industrial relations framework with machinery for wide ranging and close consultation between unions and employers, highly-developed training schemes and detailed national agreements.

In general, the sector is marked by relatively low basic pay boosted by incentive schemes, a fairly good record of industrial peace and growing fears about unemployment which is proving a major worry for unions throughout construction.

The separate labour framework for the plant hire industry has its roots in the formation of the Contractors Plant Association in 1941.

The CPA, representing U.K. plant hirers, now has a pay and conditions agreement with the three principal unions in construction, the Transport and General Workers' (by far the most important in plant hire), the Union of Construction and Allied Trades and Technicians and the General and Municipal Workers.

The agreement falls under the general auspices of the Civil Engineering Construction Conciliation Board, whose overall agreement for the construction industry also covers the plant hire sector other than for pay and conditions.

It covers all operatives on JCB's cranes and earth movers. The construction section of the engineering workers' union has a separate agreement with the CPA dealing with the manufacturing side of the industry.

In general matters, including industrial relations, the CPA keeps in close contact with the Federation of Civil Engineering Contractors, the employers' side of the CEECB.

Basic pay is about 80p an hour with payments of up to 15p an hour extra for the larger machines in the 25-100 tons category.

Union officials say, however, that this bears little relation to actual pay packets with a widespread system of cash incentive schemes, bonuses and, when buildings demand allows, overtime payments.

A £2.50 to £4 Phase Two pay deal for all construction industry workers was agreed this year and runs from June.

Among plant hire workers, as throughout construction, there is now considerable unrest over general pay and conditions.

The unions are committed to a drive towards a 35-hour week, higher basic rates with consoli-

dation of pay supplements and additional holidays in a new settlement to run from June next year.

Training, through the Construction Industry Training Board, covers driving and vehicle and equipment maintenance and terminates with City and Guilds examinations.

Under the CEECB, a trainee can sign a training service agreement to cover a three or four year period with training principally carried out at the huge Bircham Newton civil engineering college near Kings Lynn. Joint union-employer committees of the industrial training board monitor the training schemes carefully with a regular system of visits and meetings.

The biggest headache facing unions in construction is employment which has severe spin-off effects right through the industry and has made a significant impact on plant manufacturers and operatives.

Out of the estimated 2m workers in construction, the latest figures put the unemployed at more than 208,000. This is largely the manual labour force. When the professions, including civil engineers and architects are included, the number is probably more than 275,000.

The unions are worried, too, that the situation does not appear to be easing in any significant way. Figures indicate that unemployment in U.K. building dropped 1 per cent in August over May. The figures mask a number of marked regional differences, however, with Scottish unemployment (29,000 workers) worsening and the major northern areas showing no improvement. The £400m boost for construction in last week's Budget will go some way towards alleviating the union's worries.

One of the effects has been to drive out of business some of the smaller plant hire firms. Not only has the general poor level of activity in construction shrivelled job opportunities but it has also hit pay packets by eroding bonus and overtime earnings for plant operatives and workers employed in plant manufacturing.

The unions have been making determined efforts to try and persuade the Government to inject a much greater amount of money into construction as a restorative measure for the industry. At one point earlier this year union officials were

talking of a possible upswell among the workforce against accepting Phase Two pay rises unless Whitehall started dishing out more cash.

Apart from general attempts to try to bring the Government round to their way of thinking, the unions have been faced with difficulties in a number of specific areas of employment which affect plant operations directly.

The Transport and General Workers' in particular has been attempting to force the expansion of open-cast digging, especially for anthracite.

The unions say that the 11.5m tons of open cast coal "won" in the 12 months up to March this year saved about £370m in oil imports. Projections appear to show that open cast digging could provide 15m tons a year by 1984 and another 5m tons on top of that by the end of the century.

Beyond the savings on imports, open cast coal helps provide the flexible element in production that allows the Coal Board to meet demands.

The unions, however, have been blocked on a number of schemes by the pressure of the environmentalists' lobby.

Mr. George Henderson, the Transport and General Workers' national officer for construction says the lobby is well meaning. But he points to the short life span (2 to 3 years) of most open cast workings and the fact that many open cast areas are returned to their natural state.

"I'm concerned about my members and I'm concerned about unemployment. One of my jobs is to ensure that open cast mines are opened up."

The same problems exist in many of the country's main gravel extraction areas, like the Thames Valley which provide work for a large number of plant hirers and operatives.

Health hazards too are a major union concern. Although relatively tight health and safety regulations cover construction sites, the nature of the business can nevertheless have unfortunate side effects for plant drivers and maintenance crews.

Respiratory diseases, dust in the lungs, and the "white finger" suffered by workers using vibratory tools are monitored by both unions and employers as well as the rules governing all work areas where there is a constant physical danger. Quarrying still has the highest accident death rate of all U.K. industries.

Occasionally, a health issue will blow up into an industrial dispute as occurred earlier this year when construction workers including machine drivers discovered they were operating close to what they believed to be potentially dangerous asbestos.

Onshore and offshore work related to the North Sea oil industry has brought new job opportunities as well as big money and, at the moment, the building of the huge oil terminal at Sullom Voe in the Shetlands is providing one of the few regular sources of overtime.

But like most new things it has brought problems in its wake and the "closed environment" of North Sea life, whether that of a crane operator on a rig or a dump truck driver amid the "barracks" style life of Sullom Voe, has bred problems for the workforce and for the union officials whose job it is to look after their interests.

Nick Garnett

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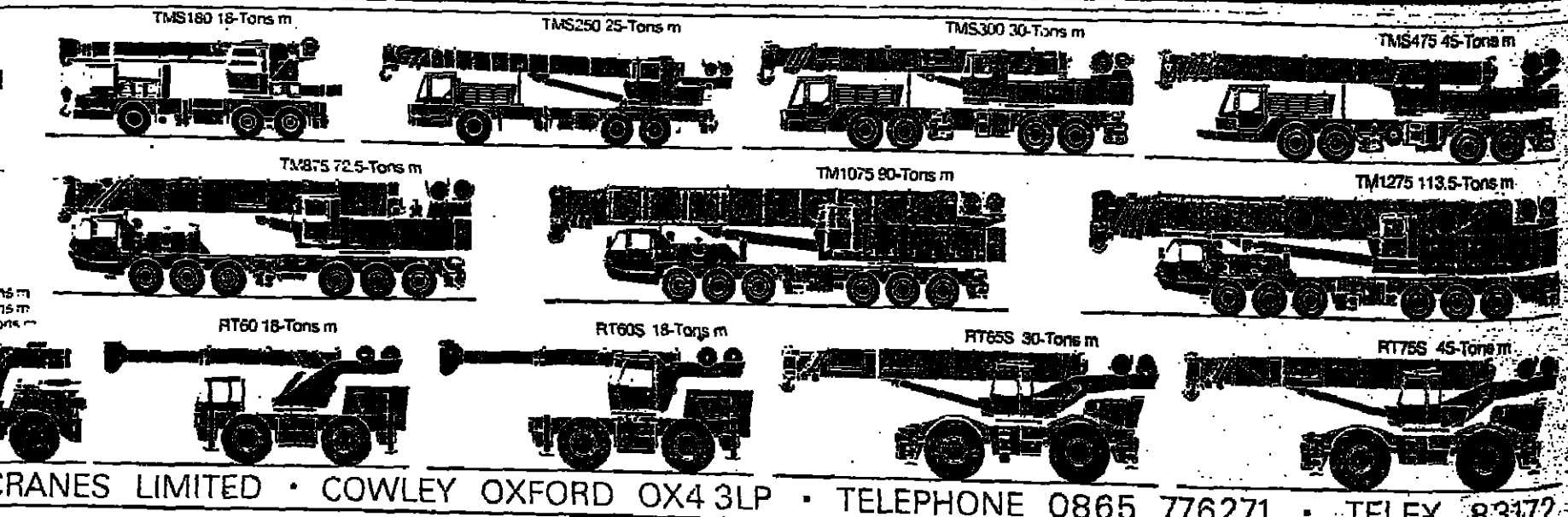
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too Birmyingham...**

by Ethelred Bodkin and *1977*



And nowe heree com ye evenynge of ye yeare
Whene building and construction doo moste dreare
Assaie ye feete wite muddle (and ofty mes worse)
And raine and fogge a sore depressynge curse

Of progresse fore ye projects is theye none
While wages and ye plante costs eke goe on
And ye barons and theye ike inne parlymente
Devysse freshe means too lessen oure contente



Butte hold! is theye no starre thesee days too lyghtenne
Twixt Bendidormme and Christmaste de too bryghtenne?
Ye calendar no festy valle too hoost?
Too lyde us til ye mince pyes and ye roast?

Aye, midde darke Novembers skirtes methinks I spye
A comlie legge too lyft ye jaded eye
aloft - a comlier thyng, ere nowe concealed -
Ye damsel Interbulde is nowe revealed



Hir Palace (moved theye nowe too Englands centre)
Goode menne and lesser goode she urge too enter
Hir treasures theye re too see inne store on store
Ye rooffe trusse and ye windeye and ye door

Thesee ilke inne shappes and syces theye too see
What was inne building, is and what will be
Ye liddle 'prentyce boys artfully will fix
Ye woode joyns and wite the cemente ye bricke



HEAVY EARTHMOVING and levelling equipment manufacturers make up the bulk of the U.K. market in construction equipment, accounting for a third of total sales with a turnover of £282m. in 1975.

Yet as companies in this sector know only too well, 1975 sales represented the last of the orders before the U.K. market ran sour. There was a short-lived upturn earlier this year, as local authorities and private companies brought forward plant purchasing to take advantage of the regional development grants before these were withdrawn in March 1977.

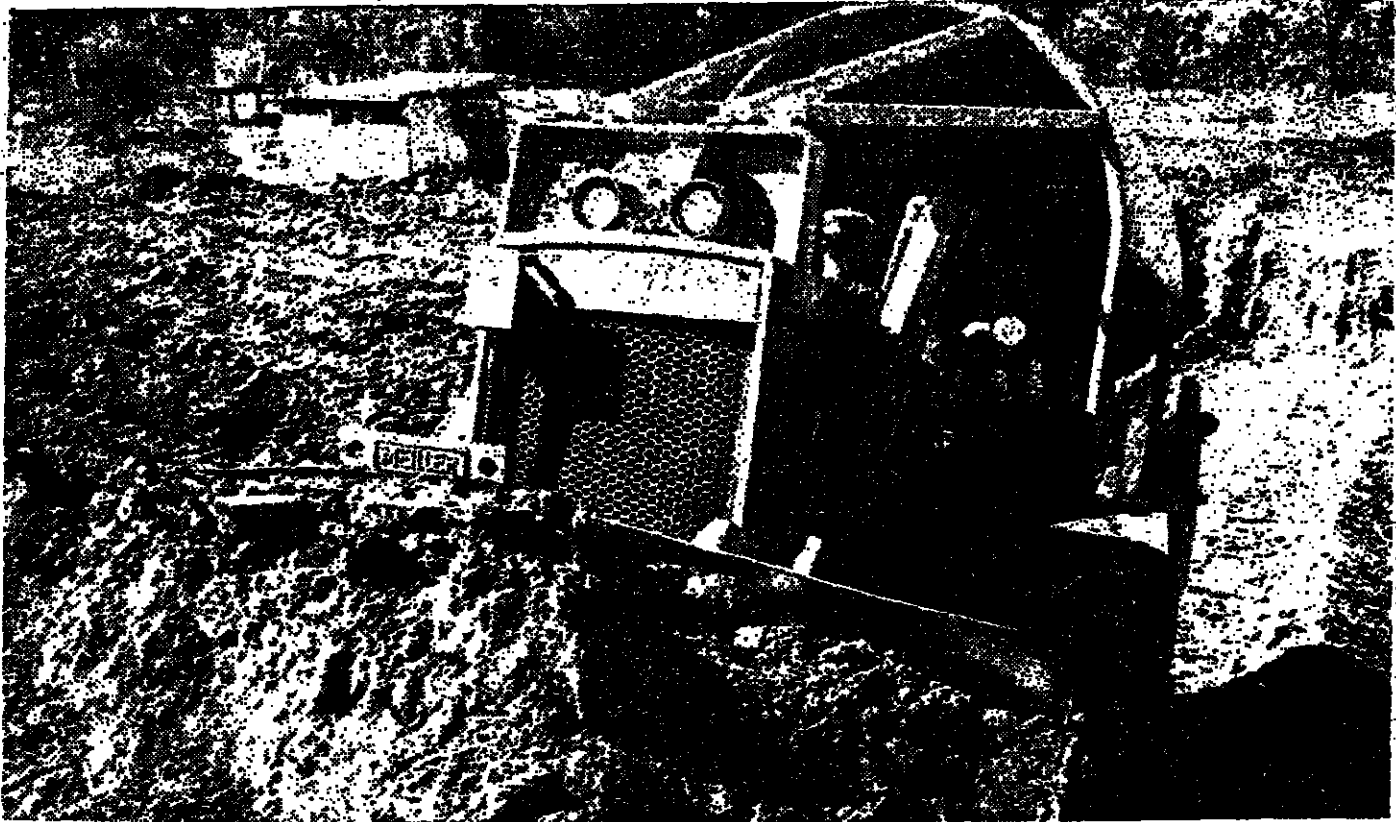
But even this improvement in U.K. sales did not represent an absolute growth in the market for heavy earthmoving and handling equipment. Buyers accelerated orders that would probably have come later this year. The industry is still working through these orders, but for some items, earlier ordering has meant virtually near-empty workshop floors this October.

The problem which has long-faced the heavier end of the construction equipment industry is that its products are so specialised that they are dependent on a handful of user markets. Earthmoving and levelling equipment including crawler tractors, graders, earth scrapers, dumpers and off-road shovel loaders are purpose-designed to work on specific, large scale projects. When Britain was building hundreds of miles of motorway each year, there was a steady demand for these huge machines. But the moment local authorities and the Department of the Environment cut back on these big money-spinning programmes the heavy equipment was unable to find sufficient alternative uses to cushion the manufacturers.

Divert

Only the broadest-based companies have a sufficiently wide range of interests to divert resources from the heavier end to lighter, more general purpose equipment. But a glance at a list of leading companies in the business of making heavy earth-moving equipment reveals there are few with such an ideal combination of products.

British Leyland's Special Products Group comes close to such an ideal, with its Aveling-Barford, Aveling-Marshall, and Goodwin companies making



Massey Ferguson MFD 700C hunting for sapphires in Australia.

much of the heavy equipment needed for motorway building, quarry and open-cast mining work.

Aveling-Barford's managing director, Mr. A. Cheetham, is responsible for manufacturing and selling off-road trucks, with carrying capacities from 17-50 tonnes; graders for open-cast work; road rollers; tractor shovels; and dump trucks. The sister company, Aveling-Marshall, makes crawler

Mr. Cheetham said his company was still maintaining its share of the U.K. market, despite a severe fall in orders, which has now reached an all-time low for 30 years. It was very much a buyers' market, said Mr. Cheetham, yet some-how companies at the heavier end of construction equipment manufacture had not been left with completely blank order books. These orders were still profitable, at least for many of the larger companies in the industry, perhaps indicating the high price levels which prevailed during periods of high demand as in early 1975. Aveling-Barford has picked itself up during the recession by

stepping up its export drive. During periods of active demand in Britain, the company managed to sell 65 per cent. of its output overseas, leaving itself to find U.K. market outlets for the remaining 35 per cent.

Now, said Mr. Cheetham, the company had boosted the proportion of equipment going overseas to 70 per cent. He intended to maintain this export level even when the British market picked up once again.

In an act of faith that the market will pick up at home and that it will be possible to maintain an increased presence in overseas markets, the company has started a £6.4m. investment programme. This is designed to expand production capacity in off-highway trucks, up to 50 tonnes capacity, in graders for the open cast market and in road rollers, tractor shovels and in dump trucks. The major beneficiary of the programme is

the company's plant and work force at Grantham, Lincolnshire. Approximately £750,000 of the money will boost component fabrication production equipment at Newcastle upon Tyne.

This will ensure the company has adequate capacity through the 1980s; building the new production plant itself will continue until the end of 1979 or early 1980. Meanwhile production of some items of heavy construction plant at Aveling-Barford's factories and those of other manufacturers like General Motors in Scotland, where Terex equipment is made, is severely depressed as a direct result of public expenditure cuts.

One of the worst affected sectors is that producing road rollers. Industry representatives have talked of roller sales in Britain being "decimated," especially in the three to 14 tonnes range. Sales are so de-

pressed in this product line that companies are talking in terms of having no work at all in a few months unless Government action is taken to stimulate local authority road building and repair programmes.

Few managers in the industry have experienced such a depressed road roller market. Many believe the rate of intake of new orders has reached rock bottom, but everyone is desperately worried in case this trough bottom should be rolled flat and extended into 1978, by inadequate Government recognition of the urgent need for more road work.

In other sectors the picture is much the same, with the grader market the exception, as the National Coal Board extends its efforts to exploit open cast reserves. Manufacturers describe the grader market as "buoyant." The U.K. market for tractor

shovels is less buoyant, but described as being as active as any, a comment which brings rosy glows of contentment from the manufacturer.

Companies producing off-highway trucks up to 50 tonnes capacity and dump trucks are finding demand sluggish, with the crawler market is quiet. The cut-backs in road building and maintenance are again possible, and not only for obvious reasons. The quarry which supply road building material are running at around 50 per cent. of capacity, a state of affairs when the heavy plant manufacturing sector would like to see a boom in replacement equipment mark. Quarry managers have better things to do with their scarce resources than to buy new plant when much of their existing equipment is lying idle.

Worrying

But what is worrying heavy construction equipment manufacturers more than anything is that this depressed state of home demand has now become a feature of their industry: approaching three years, with the slide starting in 1975, that time there was a lack of home generated orders, with industry working at 80 per cent. of capacity. Even then some firms were operating at only 50 per cent. capacity, but now, the cut-backs in public expenditure for roads, motorways and their simple repairs begin bite, there can be few companies at the heavy end of the industry working at much over 50 per cent. capacity. Heavy dependence on local authority road work is now recognised by the industry as something to be avoided, and it is true that manufacturers benefited from the boom cyclical demand created in Scotland's North Sea bonanza. This may have helped mitigate the worst effects of the cut-backs in the public sector. Oil terminals and pipelines are built. But as every company knows it will be a long time before such welcome relief has less comes their way again.

Lynton McLain

The building site and its concrete mixer

MOST PEOPLE look on the concrete mixer as the building site's basic machine—and no wonder. Battered, caked with generations of dried concrete, noisy, belching fumes from an erratic engine, fed apparently haphazardly with a mixture of sand, lime and water, it has all the qualities to create a popular image.

The manufacturers of this modern artefact, however, are less concerned with this aspect than with its saleability in contracting markets. Concrete mixers, and the various types of concrete placers, account for about a 3 per cent. share of the British construction equipment market with a sales figure, in 1975, of £27m. Exports are crucial, but they have to be fought for.

The past few years have been difficult, largely because the longer than expected depression in the U.K. building industry has meant a low level of demand from the home market and thus made the manufacturers cautious about investment. This caution, while understandable enough, has meant that it has been correspondingly more difficult to compete in export markets.

Compensate

Comments from the reports of Babcock and Wilcox, whose Winget division is one of the largest manufacturers of concrete mixers and concrete placers, illustrate the point. In 1974 the chairman said of the company: "Winget Ltd. was the company most affected by Government price controls and the collapse of the house-building market. However, they have done very well in expanding exports to compensate for lower sales at home."

In 1976 the comments show the same mixture of optimism and caution: "Sales of concrete mixers and dumpers continued at a satisfactory level in spite of the depressed market at home and the very competitive conditions abroad. As a result turnover and profit were maintained at a similar level as in 1975."

The bias of treating exports much more seriously than the domestic market is one which has been forced upon the companies in this sector. Historic-

ally—and even now—British companies have stood up very well to foreign competition: one manufacturer has estimated that in world markets the British-made dumper still commands something like an 80 per cent. share. The figure is probably over-optimistic; but it is certainly true that the companies manufacturing this kind of machinery have been showing reasonably healthy export books in recent years.

Take another example—Braham Millar, the Enfield-based group which makes a varied range of construction equipment including asphalt plant, concrete mixers, and concrete batching plant, and screening plant. In his report for this year the chairman says:

"We would be confident of reaching a further increase in the volume of output in the current year. Demand from the Middle East remains strong and from other areas is also encouraging. Active measures are in progress to develop our business even more widely, especially in the Far East, based on Hong Kong, and we shall be taking part in the International Material Handling and Construction Exhibition in Singapore in the autumn. The home market remains in the doldrums, but with an encouraging and continuing undercurrent of orders from customers obviously taking the long-term view."

To put the chairman's remarks in perspective, Braham Millar has shown a steady, even dramatic, gain in profitability over the past five years, while the home market has been "in the doldrums." In 1972 turnover stood at £2.4m., with a pre-tax profit of £181,000. In 1973 it rose to £3.9m., with pre-tax profit up to £306,000. The following year, an exceptionally bad one on the home front for most industries (and for this industry in particular), saw turnover at a standstill at £3.9m., with a very slight rise in profitability to £313,000.

Then in 1975 the rise resumed, turnover went up to £5m., with pre-tax profits at £318,000. In 1976 turnover was £6.6m., and pre-tax profits £389,000. This year, turnover was up again to £8.4m., pre-tax profits to £472,000. There seems little doubt that next

year will see the breaking of the £1m. barrier.

The growth shown by these figures is almost wholly confined to exports. The proportion of total turnover represented by exports has risen from under 50 per cent. in the early 70s to over 70 per cent. now. The group is working virtually to capacity, with three-quarters of its exports going to the Middle and Far East markets, where demand is still buoyant.

Shareholders who gathered last month to hear the chairman's statement were told that there was "an almost insatiable demand" for the group's products in the major export markets.

Like other manufacturers in this sector, Braham Millar is taking advantage of the good times to invest in new machine tools and new plant. It plans to spend £1.25m. on updating machinery throughout the group; the expenditure can be financed to a great extent from cash flow.

Floorspace

Barfords of Belton, part of British Leyland Special Products Division, is similarly expecting growth; the company is investing £400,000 in new machine tools and in 28,000 square feet of extra floorspace. The company will announce two new products in 1978, but is coy about saying what they are. "This is a very highly competitive business," says Barford's managing director, Mr. P. B. Durrant. "I don't think our competitors could copy anything we are introducing for 1978, but we err on the safe side."

The company markets abroad through Aveling-Barford International, and reckons on the Middle East, Nigeria and West Africa generally as being its best markets—though these it now thinks, are tending to level off. "The peak was around 1972-73," says Durrant.

Barfords, however, claims success in the home markets too. Two years ago it reckoned on a 6 to 7 per cent. market share. Today it estimates it has 15 per cent. of domestic sales of concrete mixers and dumpers. Recent big orders have meant that three big contractors have all "gone Barford" as the com-

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Aveling Marshall Limited

Aveling Marshall, the only British-owned manufacturer of crawler tractors, has just landed the biggest orders in a 130-year history: a total of £4¼ million from Pakistan and Kenya. This coincides with the second phase of a £5 million expansion of production capacity.

Barfords of Belton Limited

This important Company has dramatically increased its worldwide share of the market for dumpers, mixers and vibratory equipment for the building site. Notable among a new generation of products is the 3½ ton 'Boxer' Dumper.

Goodwin Barsby Limited

Goodwin Barsby, a market-leader in asphalt, quarry, sand and gravel equipment, also makes a wide range of primary and secondary, fixed or mobile, crushers. Recent exports to Guyana, Tanzania and the United Arab Emirates for mobile quarry and asphalt units were valued at £1.5 million.

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CONSTRUCTION PLANT VIII

Road builders aim at greater efficiency

ROAD BUILDING in this country has been a declining industry for some years. According to figures from the Department of the Environment the amount of Government money spent on roads in the year ended March last was £723m, more than half (38 per cent.) of which went into motorways. The DoE estimates that by 1978-79 Government spending on roads will have fallen to £505m, and within this two-year decline of 30 per cent. the amount spent on local authority roads stands to fall by more than two-fifths.

The ramifications in this sort of projection for the road making and maintenance industry — both for the contractors and the machinery makers — are far reaching. For the latest DoE estimates merely suggest an acceleration of a trend that has already set in, a trend towards reduced levels of activity that is currently creating some very chilling winds for the roads industry. The DoE estimates mean that Government spending on roads by 1978-79 will be a full 43 per cent. lower than it was at its peak in 1973-74, with the decline at the local authority end of the business extending to some 53 per cent.

Pressures

There are, of course, pressures for some sort of official reversal for this pattern of events — for example, around an eighth of the total U.K. unemployed are building workers of one sort or another — but few in the construction industry set much store by them. The pragmatists are simply gritting their teeth and setting on with the job of making do — increasing efficiency where possible at home and expanding in overseas markets.

In fact most of the major road contractors in this country now have a more than vital stake in roadbuilding and maintenance outside the U.K. Among the makers of construction equipment there are companies

like Blaw Knox — which produces a range of paving machines and dominates the home market for this type of product — that export around four-fifths of total production. Roadmaking in this country remains a largely fragmented industry. If there is a leader the accolade probably belongs to Tarmac which could control as much as 12 per cent. of the home market, competing directly against companies like Wimpey, McAlpine and A. Monk. Tarmac's roadbuilding activities come under the auspices of the Tarmac Construction subsidiary which at the moment has something like £18m. (at current market prices) of construction equipment under its control.

Tarmac stresses that construction equipment at its end of the business is not especially advanced in terms of technology. It tends to be heavy-duty, solid, with reliable mechanisms able to withstand an immense amount of rough handling in all types of weather. The company occasionally finds itself using trimming machines which combine a laser operation with general robustness, and a recent innovation in paving machines has led to the use of guidewires along the side of the embryo road. But for the most part the backbone of its fleet is the earthmoving, digging, scraping and crane variety of basic machinery.

The average working life of road making equipment will vary from contractor to contractor. Tarmac prides itself on the efficiency with which it uses its machinery — thanks largely to the use of computerised system allowing the company to turn over (sell and replace with new parts of its fleet at "just the right time.")

Something like 30 per cent. of the plant that the company uses would at any given time come from plant hire companies. Of the rest, more than half would be adapted to the computerised system which works by calculating in terms of working months per machine

and discounting the re-sale price against the cost of a new replacement machine. The system works in areas where machines are many in number, where activity is relatively higher and where working lives are generally understood. Tarmac implemented the system in the late 1960s and to date is very happy with the results.

Flexible

For the most part the equipment used by the major construction companies is flexible enough to be handled in all weathers, on all types of ground and in conjunction with almost any type of road building programme. At Tarmac the heavier machines — such as earthmovers — would have a working life of between five and seven years while at the lighter end smaller machines would generally be replaced by the company at intervals of between three and five years.

Roadmaking plant is made by a variety of engineering companies. The top 10 worldwide producers of construction plant and equipment are all American — with just two exceptions, Komatsu of Japan and the Canadian group Massey-Ferguson. The latter is remarkably European-orientated with something like 70 per cent. of its earthmoving production within the EEC. This country is the main base for the company's digger loader. Its factory in the North East has the distinction of being the only custom built specialist digger loader production plant in the U.K.

The company's range of crawler and wheel shovel loaders have in recent years developed dramatically, providing the means to tackle a far wider range of jobs. Developments in tyres and axles have enhanced the machines' abilities to take on really tough jobs. Torque proportioning differentials in both front and rear axles have cut down wheel spin and consequent tyre wear.

Frequently the basic work-horse on a road site, hydraulic excavators and trenchers not only have the ability to cut trenches for pipelines and services to exacting levels but can also shift earth in bulk in confined corners where space for a wheel loader or crawler could be insufficient. Major developments have taken place on Massey-Ferguson's range of excavator hydraulic systems which currently feature some of the most up-to-date designs to be found within the construction equipment industry.

Part of the Babcock and Wilcox organisation, Blaw Knox, is one of the largest makers of paving machines in Europe. The

company designs and makes products which are used on small as well as large contracts to construct or re-surface roads, motorways and airfields throughout the world. A paver is a remarkably versatile machine capable of laying all types of road materials other than pavement quality concrete. The Blaw Knox machines can lay in thicknesses of up to two feet with a minimum depth of some 4½ inches.

One distinguishing feature that marks a Blaw Knox machine out from its rivals is that it is wheel-based rather than crawler propelled. This means that the equipment does not have to be low loaded from site to site.

Depending on a number of factors — depth of laying, width of road surface and the sheer logistics of supplying the paver's hopper with fresh material to lay on the emergent road — pavers tend to travel at laying speeds that vary from five to 40 feet a minute.

The Blaw Knox paving range centres around six machines ranging in price from around £15,000 up to nearly £45,000 for the PF 980. This is a machine designed specifically for contractors needing a machine that can provide the extra width required by motorway and airfield contracts.

Jeffrey Brown

High expertise in opencast mining

OPENCAST COAL mining as practised in Britain is both a booming industry, with ambitious new production targets of 15m. tonnes a year, and a highly efficient industry. Coal is recovered and sold at a handsome profit in contrast with conventional deep mining which, overall, only just breaks even. Heavy plant is employed on a scale that most industrialists would wish to emulate but could never match.

A £4m-plus walking dragline is often to be found on the bigger British opencast sites working round the clock to scrape away over-burden and reveal coal seams. But the site will be entirely in the hands of just three or four men. Even

obtaining planning permission, often in the teeth of fierce opposition from environmental groups. Last year the Opencast Executive raised production by 1m. tonnes and put in 15 applications for new sites. But more than half of those applications have resulted in public inquiries — some protracted.

The capital purchasing programme for opencast sites including big electric walking draglines, smaller diesel crawler draglines, electric and diesel mining shovels, and dump trucks. The NCB always operates in an atmosphere of considerable and an uncertainty about its future opencast sites programme. That is because of the difficulty of

without delay and without the worry of trying to scour the world for a perhaps unobtainable giant walking dragline. The transfers are made at cost prices. The NCB has not attempted to make profits on the transactions.

Some items of plant have been leased, explained Mr. Malcolm Bish, chief production manager of the Opencast Executive, but generally the Executive keeps ownership of the big draglines.

The plant buying policy was designed in a hurry when, following the 1973 increases in oil prices, the NCB began a crash programme of coal expansion. But it is a policy which has since proved satisfactory both to the NCB and to the opencast site contractors.

Mr. Bish says that plant is selected by the Opencast Executive directors and all proposals for capital investment are submitted to the NCB for approval. Factors taken into account in the ordering programme include opencast contractors' current plant holdings; machine age and the desirability of replacement at the appropriate time; technical specification and suitability for sites being considered; availability of electric power; and manufacturers' delivery times in relation to the working programme.

The NCB likes to buy British and to further that policy has recently encouraged Ruston Bucyrus at Lincoln to build about 60 per cent. of two new American designed Bucyrus Erie walking draglines. Each of these giants has cost some £4m. and weighs 1,500 tons.

Mr. Bish forecasts that the Opencast Executive may standardise in the future upon new draglines capable of shifting 26 cubic metres of earth with each "bite." They will be smaller than some of the giants already in use but will be more versatile. They will be used mostly on the long-life sites where a drag-line can be expected to work continuously for many years between major servicing. Handy drag-lines of about 9 cubic metres capacity are seen by the Executive as the most useful tool for its smaller sites where draglines are suitable and where mobility is required.

The smaller draglines are being developed by American companies to meet the special needs of opencast sites in Britain and some other countries. They can be either diesel or electric-powered.

In Britain most opencast sites are currently using excavators

in the 6-3 cubic metres range. They can shift their loads, on average, every half minute. On the largest sites the giant draglines can shift up to 40 cubic metres each minute. B. Gordie, the machine that is recently been moved from the Sisters site, Northumberland, to another site at Butterwell, takes a 190-ton bite every second.

The Opencast Executive has given much attention to dump trucks during the revival of opencast mining in the last four years. The movement towards bigger trucks has been supported and machines now use have capacity of between 40 tonnes and 70 tonnes. A fleet of big trucks in use on NCB sites is expected to increase to at least 600. At present around £100,000 each they represent a considerable investment.

Extra

Opencast mining in Britain has a good future, one which is well recognised now by the construction plant industry. A number of extra sites have to be opened before the Opencast Executive can raise production from the current 12.5m. tonnes a year to the desired 15m. tonnes a year.

In the long term the industry may easily be called upon to reach for a more ambitious 20m. tonnes a year target. It is one of the current forecasts about growing world demand for coal come true. Estimates by the World Energy Conference of international coal usage at between four and six times current levels 40 years on from now. In Britain deep-mining is extensive and sophisticated.

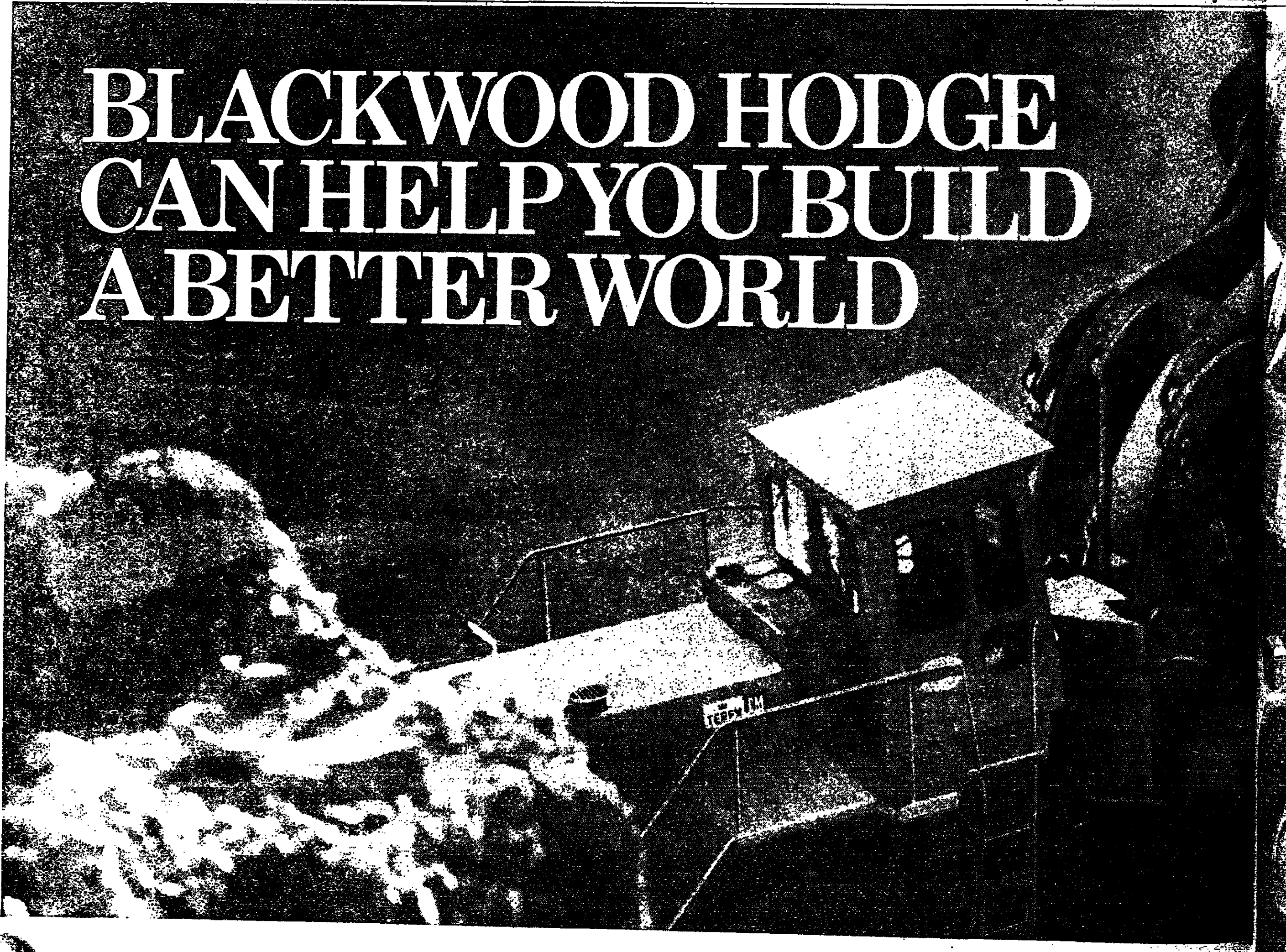
deep-mined coal is expensive and, over the next half century, will have to compete on price with other forms of power, including oil, gas and nuclear.

The NCB has an opportunity to obtain good coal quickly and — most important — cheaply by opencast mining. Thus, in the Board's interests so far, its opencast operations so far disruption of stretches of countryside will not become as serious as to damage the programme.

The Opencast Executive is building a world reputation in the sophistication of British opencast techniques and the high quality of countryside reinstatement after the coal has been taken.

Roy Hodson

BLACKWOOD HODGE CAN HELP YOU BUILD A BETTER WORLD



APPLY TO ISIA

CONSTRUCTION PLANT IX

The distributor network

EVERY construction manufacturer would like to see that a good distributor is essential for success in overseas markets, not every distributor is necessary in the home market. In the U.K. for example, two very distinct networks are taken by J.C. Marshall Excavators (JCB) and construction equipment of Leyland Special (Aveling-Barford, King Marshall). Apart from trucks made by one subsidiary, LSP acts as a distributor in the U.K. On the other hand, makes sales at all and relies on its various distributors.

Ward as distributor of the Aveling Marshall trucks. But this was a hang-over from the days when those trucks were sold by the Aveling Marshall Fowling Ward has now the distributorship of the Aveling Marshall trucks to its own distributor.

David Abell, managing director of LSP, insists that the U.K. is a small enough country for a manufacturing company to be its own distributor. He says: "LSP we have so many different specifications possible that we could not ask a distributor to stock the lot. No distributor would want to stock the very large machines we have—costing £150,000 and each—because of the space this would tie up. He expects us to do that for him."

JCB is not, in fact, in any way in need of cash. It currently has no borrowings at all. This is thanks to its policy of insisting that each U.K. distributor sends a cheque with each order to cover the full sum. The cheque is cleared at the time the machine or machines which have been ordered are despatched from JCB's plant at Rotherham.

they might be. It is simply not possible for a manufacturer to take in part-exchange somebody else's equipment. But a distributor can. And he can work out that machine, refurbish and renovate it so that it becomes a saleable product for his second-hand business.

Financial packages are important too. Customers ask for credit terms, they want to lease instead of buy and so on. The distributor must be in a position to answer these needs without falling back on the manufacturer for support. It is therefore not surprising that some of the leading U.K. distributors of construction equipment belong to financially-oriented groups. Caledonian Tractor, for example, is part of the Lloyds and Scottish finance group. And Bowmaker is owned by C. T. Bowring, now one of the largest financial services groups in Britain but which began as an insurance and re-insurance business.

Blackwood Hodge, the construction equipment distributor, was formed in 1941 through more than 50 companies in 27 countries. Most of the companies are wholly-owned subsidiaries, nearly all of them distributing construction equipment and diesel engines. The 1976 turnover of Blackwood Hodge was around £250m.

Blackwood Hodge operates from a main "service power" centre in Northampton. There are 11 depots throughout the U.K. which is divided into regions. Each depot has parts facilities and workshops and the larger ones have workshops capable of undertaking complete overhauls of construction equipment.

In addition to Terex, Blackwood Hodge in the U.K. has another important division, the crane and excavator division. This handles heavy cranes and excavators and the mobile Hydrocon truck-mounted cranes made in Scotland. The Hydrocon crane factory was revitalised both on the manufacturing and the marketing sides when in 1973 Blackwood Hodge took an interest in the company that otherwise might well have gone out of business.

Blackwood Hodge and Nicols Associates then formed a new company which now produces five models of truck-mounted hydraulic cranes up to 45-ton capacity at Coatbridge, near Glasgow, and distributed worldwide by Blackwood Hodge.

The distribution groups themselves usually appear to weather the storms better than their manufacturing principals. This is because they are more flexible. A manufacturer cannot quickly decide to make some other kind of equipment. But a distributor can put more emphasis on those machines which are currently in demand and usually makes sure he is handling a broad enough range to cope with the ups and downs of the capital goods trade cycle.

The fact is, too, that a distributor has not just one but three businesses. He sells new equipment. He has a servicing and spares operation. And he has second-hand equipment interests.

This latter business is one of the most important contributions the distributor has to offer. Many potential customers looking for new construction equipment demand a trade-in deal on their existing machines. worn out and bashed-up though

being shaped specifically for use by building operatives. In this country the RTFT made a very slow start. Anyone looking back over the development of the vehicle will notice that although forklift trucks have been in operation for basic industrial uses—such as warehouse work—since the middle 1940s, rough terrain versions did not really make a commercial appearance until the early 1960s.

Just after the World War II the armed forces were using RTFTs, but these were very large and expensive. It was not until the Building Research Station introduced its "Humper" in 1962 that a commercial RTFT became viable. This event proved a major catalyst. The sixties saw the development of the RTFT at its most intense, with rough terrain models emerging in their own right rather than as hybrid adaptations of conventional industrial machines. The process has accelerated in the seventies.

Market leader in this country among the makers of RTFTs is undoubtedly Manitou, which is part of the construction equipment empire built up by the private French company Braud Facheux. Manitou entered the U.K. market in 1971, in which year it produced barely 50 units. In the 12 months ended last January some 800 units were sold, lifting turnover to around £6m, and allowing the company to claim a U.K. market share of

almost 50 per cent. At present Manitou offers a basic range of RTFTs with a lifting capacity ranging from two tonnes up to eight tonnes. In December the company expects to unveil yet another model—a new 21 tonne capacity truck to be launched at the Royal Smithfield Show. The new model can be adapted for use in the construction industry but it will mostly appeal to the farming community.

The mainstay of Manitou's success in building up an enviable share of the U.K. market in RTFTs is its marketing policy. The company currently operates through 25 dealerships, plus a number of sub-dealers, and its sales and service outlets number over 80. The company does not compete with the plant hire industry and unlike some of its competitors it never sells directly to an end-user. The management philosophy is that if a dealer network is to be strong it must be profitable; to have a series of house accounts would mean that dealership profitability could be weakened, which would then possibly result in the erosion of the underlying capacity of dealerships to offer sales and maintenance services.

Franchise Euclid became part of General Motors, and although part of the business was later hived off for antitrust reasons (Euclid is now owned by Daimler-Benz), in-day the General Motors Terex distributorship is Blackwood Hodge's most important franchise.

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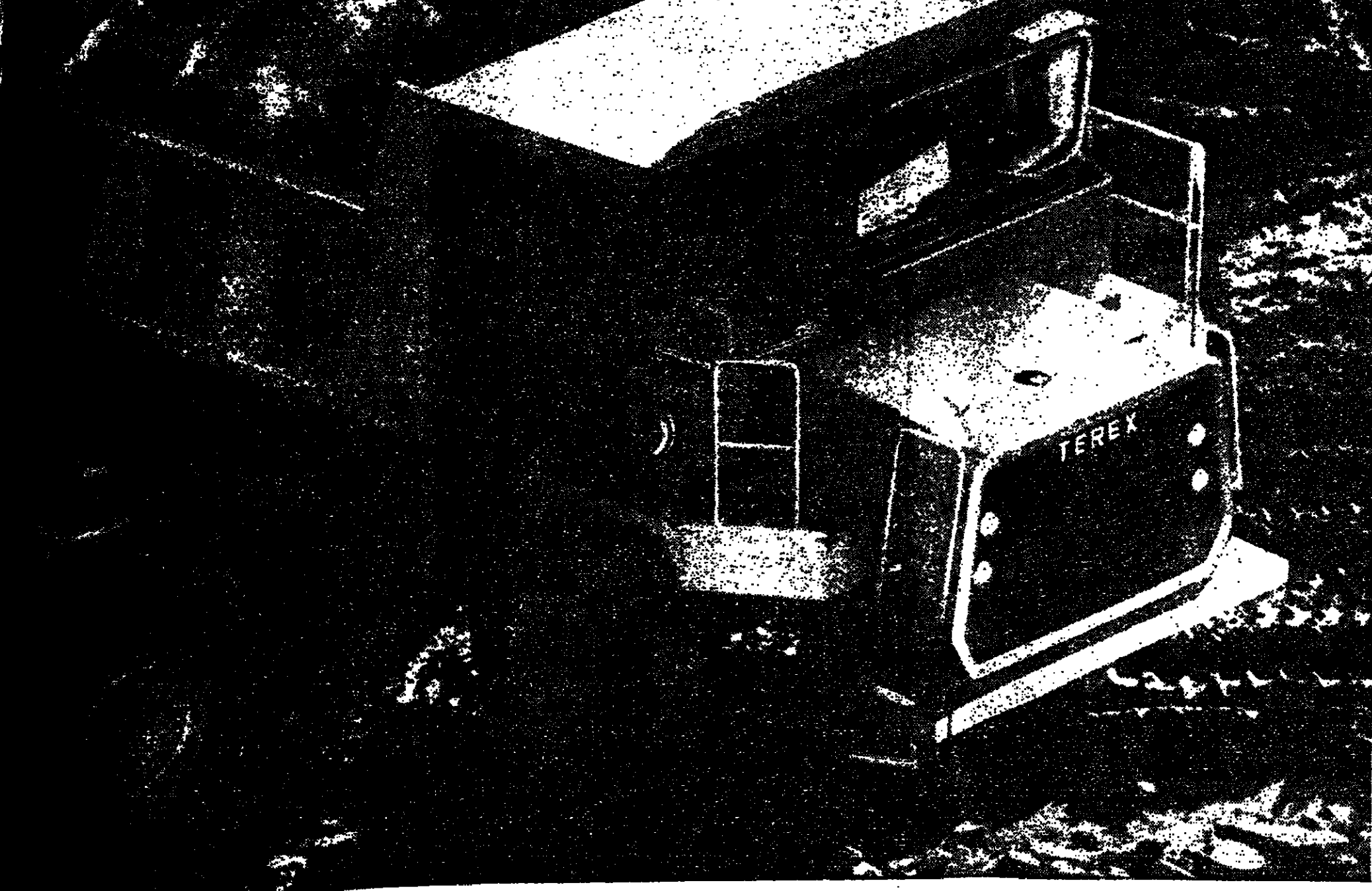
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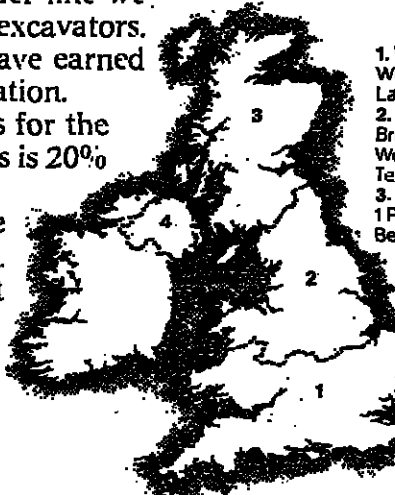
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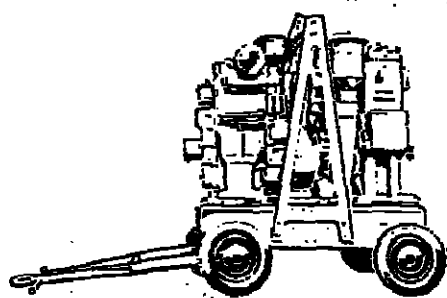


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CONSTRUCTION PLANT X

Crane makers look overseas

TWO PARTICULARLY strong mobile crane manufacturers have emerged in the U.K. following the merger boom of the 1960s. The two groups, Coles and Jones, both have spent the past couple of years reshaping themselves and putting the finishing touches to their competitive edges.

Acrow collected Coles along with Priestman Brothers, makers of crawler and lorry-mounted cranes, when it acquired the Steel Group. Today Coles accounts for about half of Acrow's U.K. turnover and three-quarters of its exports.

Coles is already the largest manufacturer of its kind in Europe and has publicly stated that its aim is to increase significantly its share of world trade in mobile cranes. It expects to overtake most of the U.S. and Japanese competition and establish itself alongside Grove of the U.S., currently the world's biggest producer.

A £8m. expansion programme is well under way at Coles factory, the Crown Works at Sunderland—the biggest construction equipment assembly site in Europe—and the company took advantage of the Government's Accelerated Projects Scheme to speed it up. The scheme has enabled the concern to condense a five-year programme into four years.

Coles admits it lost ground in world markets because it concentrated on diesel electric mobile cranes at a time when the customers were turning to diesel hydraulic types.

To-day Coles produces around 1,200 cranes a year and is in fifth place in the world league table behind Grove (2,500), Kato and Tadano of Japan (2,000 and 1,500 respectively) and P and H of the U.S. (1,300).

The Crown works account for about 60 per cent of Coles' output. A new £1.5m. fabrication shop has been installed and by 1980 the remainder of the plant will have been completely modernised. The idea initially has been to step up production

from 70 cranes a month to 100 from. And it has also enabled Jones to offer an improved spares supply and service back-up.

Jones and Coles are alike in that they both believe in going for a high added-value content in their products and they make a great many of the parts and components which go into their cranes—in Jones' case only 30 per cent of the components by cost are bought-in.

And Jones, too, has pulled forward its four-year investment programme because of the incentives offered by Government aid schemes.

Jones sells more than 60 per cent of its output overseas and the sad fact for Britain is that Jones and Coles often clash head-on in export markets. Mr. Walsley says that Jones concentrates particularly on those areas which obviously can afford to buy its cranes rather than the developing countries—“there is no point looking for business in countries which have deep balance-of-payments problems.” The selling line used by Jones is a hard one. “A crane is not all that expensive an animal yet it brings immediate capital returns because it makes money as soon as it is put on site. It creates wealth right away,” Mr. Walsley points out.

Essential

For the crane makers export is essential in current circumstances because demand in the U.K. and Europe generally, is so terribly flat. An indication of the problems was given earlier this year when Richards and Wallington Industries, the biggest U.K. crane hire group, revealed that the slump in the construction industry in the London area had forced it to cut its already depleted crane fleet from 300 to 170 in that region.

In those circumstances, the crane manufacturers' current cry that the hire companies should charge the kind of prices which would enable them to replace their fleets more regularly hardly seems likely to meet with a positive response.

Richards and Wallington also has an interest in crane-making

Fifth

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Strong market for loaders

THE CRUCIAL FACTOR in the development of the lorry loader as a major piece of mechanical handling equipment remains the human one. Both the cost and the fallibility of manual loading and unloading operations has created the need for a more efficient system, but a change of this magnitude is bound to create problems.

The somewhat haphazard nature of handling building materials, with each sector or even company developing its own methods, has meant that the lorry loader needed to be as adaptable as possible. Loose materials have been one of the major problems, but the trend towards unit loads is now a natural progression.

It is now more than ten years since the market for lorry loaders began to develop strongly, although the initial demand was slow, perhaps as a result of insufficient marketing pressure. But as labour costs have risen and the losses from breakages have become increasingly unacceptable, demand has risen steadily.

In practical terms, companies have seen their profits being eroded by the increasing cost of deliveries, and although a lorry loader does reduce payload on a vehicle, it is now firmly established that overall costs can be substantially reduced by their use.

The growth of the market for lorry loaders has been increasing at the rate of around 16 per cent a year in recent times, according to one of the major suppliers. The major users remain the timber and brick industries, and in the case of the latter, the incidence of damage is thought to have fallen substantially, although again there are no official figures to bear this out.

According to a survey carried out by Construction News, the traditional gang of four men takes around two hours to off-load a delivery of 5,000 bricks manually and breakages are often as high as 20 per cent, and seldom less than 5 per cent. Ten

years ago, top quality facing bricks fetched around £40 per thousand but to-day the same bricks would cost around £130.

In 1967, a load of 5,000 bricks would have cost about £6, including labour, and 10 per cent. breakages, to offload, to-day the same manual offloading, using the same method, would be £36. To these figures must be added the considerable increases in delivery vehicle delivery. A decade ago this would have amounted to perhaps £2.60 an hour, only a fraction of to-day's costs.

The problems which arise once the load has been delivered include the inability to break down these loads into easily manageable units, non-standard packages and non-compatibility of site plant.

It is clear that a far greater degree of co-operation between suppliers and contractors will be necessary in future to overcome these difficulties. Although it will not be easy to solve the problems posed on standardisation, there are other areas such as site organisation where some progress can possibly be made more easily.

One major annoyance experienced by building contractors is the tendency of suppliers to deliver materials on site in a place convenient to the driver rather than to the contractor. As a result there is unnecessary additional handling, where, if better co-ordinated, materials can be supplied in the right place at the right time, reducing the use of on-site handling equipment considerably.

For example, on some sites new large capacity loaders can deliver packs of bricks or blocks up to the first floor level, eliminating a complete stage of handling, reducing congestion on the ground and saving time and money. This is an ideal opportunity for planners to make the best use of equipment in its increasingly adaptable forms such as large capacity and long reach.

Overall, it is estimated that a lorry loader increases vehicle utilisation by up to 20 per cent, with corresponding savings in haulage costs and reduces

APR 1978

CONSTRUCTION PLANT XI

Excavators challenge the U.S.

DEMAND in world markets is an established characteristic of the British excavator and trencher manufacturing industry.

Over the last three years, demand for these machines has been forced on many companies by the face of an unprecedented boom in home demand.

This ability to survive and prosper in this sector is important to the overall success of construction equipment in Britain.

Excavators and trenchers ranked second only to earthmoving and leveling equipment in the construction industry league table from the Government's Business Monitor.

Total sales of excavators and trenchers reached £118m. in 1976, representing 15 per cent. of the total British market for construction equipment.

Leaders in this sector of the industry regard 1975 as a notably good year for home sales although total units sold to reach the peak of 1973, 2,550 excavators of the all-hydraulic type were in Britain.

Estimates

An idea of how low demand in this sector is given in provisional estimates of these excavators in 1977. At 1,200 units, the low reflects the depressed state of the construction and engineering industries. The depressed state of the economy is also reflected in the decline in public expenditure. These have slowed down and road building programmes and brought a virtual halt to the building of new service facilities such as works, new sewage treatment and other works called for the use of the ubiquitous crawler workhorses.

In an industry, like the tractor sector, which is so dependent on the whims of Government for its fortunes, often action has to be taken to preserve production capacity during periods of recession.

Such action has been taken by J. C. Bamford and the top two companies in the 360 deg. excavator market in Britain. As well as

aiming to capture ever greater shares of the estimated 37,000 unit annual world excavator market, these companies have both attempted to broaden their appeal to customers at home and overseas.

Hymac has made perhaps the greatest change to its operations, with an agreement signed in January to sell West German Demag excavators in Britain. The Hymac company, part of Powell Duffryn, depends heavily on excavator production. The declining home market had started to affect the company's fortunes in Britain.

The agreement to sell Demag excavators extended Hymac's coverage of demands in the construction industry. The managing director of Hymac, Mr. Edward Darrell said the arrangement opened considerable prospects in Britain.

The company's reasoning is that previously it had been unable to offer a complete range. However, it still won 34 per cent. of the U.K. market for 360 deg. excavators of all types.

A high proportion of this market share, however, had been won by Hymac through its 10 to 12 tonne excavators, which gave Hymac 63 per cent. of the British market in this size of machine. The company now believes and hopes that this over-dependence on one type of machine will be reduced with the Demag agreement.

The agreement gives Hymac access to the complete range of machines from 30 to 110 tonnes. This will complement the company's own range from 10 to 30 tonnes. Later next year, Hymac plans to introduce one of Demag's biggest machines to the British market weighing 210 tonnes.

Not surprisingly these machines are not destined for routine site work. But their significance for the home market should not be overlooked on the grounds that they are specialist excavators.

Hymac believes a growing sector of the home excavator business will be with major contractors working for the National Coal Board on open cast mining projects. Previously uneconomic sites are revived and new areas uncovered as coal becomes more and more attractive as an energy source.

Many other excavator manufacturers agree that open cast mining is turning increasingly to hydraulic excavators

with their greater flexibility and ease of maintenance, while walking draglines, conventionally used in open cast work, continue to work on over-burden stripping and coal recovery.

Hymac does not believe the excavator will ever displace the dragline, and clearly this is unlikely when dragline bucket capacity can be up to 35 cubic metres compared with around 5 cubic metres for a 50 tonne excavator. "While there is a steady increase in the amount of open cast work, contractors have shown a fairly significant increase in interest

in using excavators, particularly over the past 12 months," said Mr. Darrell.

Hymac also recognises that if there was a sudden revival in domestic demand, it could place a serious burden on installed capacity in Britain. The company was doing as much as it could in the circumstances but it doubted whether British makers could cope with a sudden vastly increased demand.

Hymac had made substantial investments at its Rhymney, South Wales main factory and at a smaller plant in Essex.

AS WITH other sectors of the construction equipment market, the companies which make crushing, pulverising and screening equipment report mixed fortunes. The capital cost of much of the equipment is high, and the depressed home market is unlikely to encourage much investment.

However, exports can and do take up—at least in the short term—some of the slack. A growing world population and increasing urbanisation mean that although projected growth rates world-wide have slipped somewhat, they are still standing at a healthy 8 per cent. or so.

The types of equipment lumped together under the crushing, pulverising and screening label are for breaking down rock into sizes suitable for road-making, or for making into asphalt. Their primary marketing feature is toughness; the crushing and pulverising plant must be capable of continuous and infinitely repeated pounding actions aimed at reducing hard rock to small pieces.

The human equivalent of these machines is the man with the sledge-hammer—seen in mass version in the prison chain gang. To-day the machines turned out by the major manufacturers are in many cases as productive as a hundred chain gangs.

Innovation and increasing productivity are necessarily the

name of the game in this sector of the market, because competition from American and European manufacturers is fierce. While they do complete in the home market—and British manufacturers are becoming gradually accustomed to viewing the EEC as an extension of the domestic market—they are, more significantly, in competition for the big export markets, where indigenous companies are either small or just beginning.

"It used to be that we had the world to ourselves," said one executive, "but now the really fresh markets are full of groups from Europe and America, jostling each other for trade. The fact that we were very often there with the Empire doesn't really give us much of an edge any more—if any."

Last year's report by the Construction Equipment and Mobile Cranes Sector Working Party of the National Economic Development Council highlighted possible weaknesses in the international strategies of many British manufacturers in this area.

It said: "The essentials for sales and success are product quality/performance, delivery, after-sales service, spares back-up, suitability and possibly price. There is evidence to suggest that, in spite of excellent products in earthmoving equipment, excavators, cranes, crushing equipment and road maintenance plant, the U.K.

with some important exceptions, is weak in terms of world distribution, service, spares and back-up. In addition, there are weaknesses in world market research and studies of world needs in relation to the products being made and designed."

While the NEDC warnings are obviously salutary, there is a certain temptation not to heed them, or to downgrade their importance. Even with increasing American and European competition, British firms are very strong indeed in certain areas of the world, notably the Middle East and West Africa, especially Nigeria. The Far East—the Philippines and Malaysia are often quoted—and South and Central America, are similarly good growing markets.

Strength—and a continuing boom in markets where one is well placed—are a mixture which might encourage a certain complacency. Nevertheless, some firms are talking of establishing permanent full-time sales representatives in the Middle East and in West Africa where they have not had one before: others talk of upgrading their sales pitches to these countries.

A typical ratio of exports to domestic sales in this sector would be 70:30: the recent (and continuing) recession in the domestic construction industry will have helped push up the

and abroad. Clearly there will be no such dovetailing of supply and demand in Britain when the construction industry picks up, as expected during the middle of next year, unless there is an increase in imports or a decrease in exports.

Balancing such a prospect are the efforts of companies with a strong export performance. Hymac exports over 60 per cent. of its product output and J. C. Bamford exports around 70 per cent., with prospects of even greater exports as the company

opens up the U.S. market for the first time.

Anthony Bamford, the company's chairman, is convinced that the U.S. is now the major growth area for construction equipment. So far JCB has not attempted to sell its range of conventional 360 deg. all-hydraulic excavators in this market. Instead, the company has entered the U.S. with its back-hoe excavator loader machine. This is now getting into the construction industry "everywhere," said Mr. Bamford.

The sales campaign began in

1976 with US sales of \$2.5m. By the end of 1977 sales for this one category of excavator will have quadrupled to \$10m.

Next year, JCB is aiming to win 10 per cent. of the U.S. market for back-hoe excavator loaders, with estimated sales of \$20m. The competition is intense, with five of the top managers in the industry fighting hard to keep JCB out. Massey-Ferguson, Ford, John Deere, International and Case would all rather not see JCB in their home territory.

L.McL.

the Screen Ranger and the Crush-Ranger.

The company will design, manufacture, erect and commission complete quarrying plants which can mean the equivalent of a medium-size factory. At the smaller end of its output it makes a variety of vibrating screens, like the Grizzly, the Rapide and the Powerflow.

Goodwin Borsby, Braham Millar and Peggson are all competitive across most of the Parker range. Peggson has a wide variety of crushers, including two Jaw crushers, Braham Millar manufactures quarry plant, taking in the products made by the various companies within the group; Goodwin Borsby specialises in asphalt plant and has a range of crushers and of screens. All are large enough, either through steady growth (Parker), merger (Braham Millar) or by being a subsidiary of a large corporation (Goodwin Borsby) to compete successfully in international markets.

The biggest success of recent months, however, goes to Parker. The largest single order ever received by the Leicester group came from the Philippines in May this year. During the next 12 months, Parker is to supply 84 mobile crushing and screening plants, together with asphalt producing units, for large-scale roadworks in the Philippines. The order is worth £7m.

While there is unlikely to be an order to cap—or even seriously rival—the Parker order, the other groups continue to show solid contracts from abroad. Goodwin Borsby is a good case in point, with recent orders from Guyana (£660,000), Abu Dhabi (£600,000) and Tanzania (£250,000).

The big companies expect that the building recession will give way to a period of growth, and have been retooling and extending their capacity to meet it. Commenting on the construction industry as a whole, the NEDC report was somewhat pessimistic. It said: "The estimated plans indicate that the U.K. will continue to lose both its product market share and employment share."

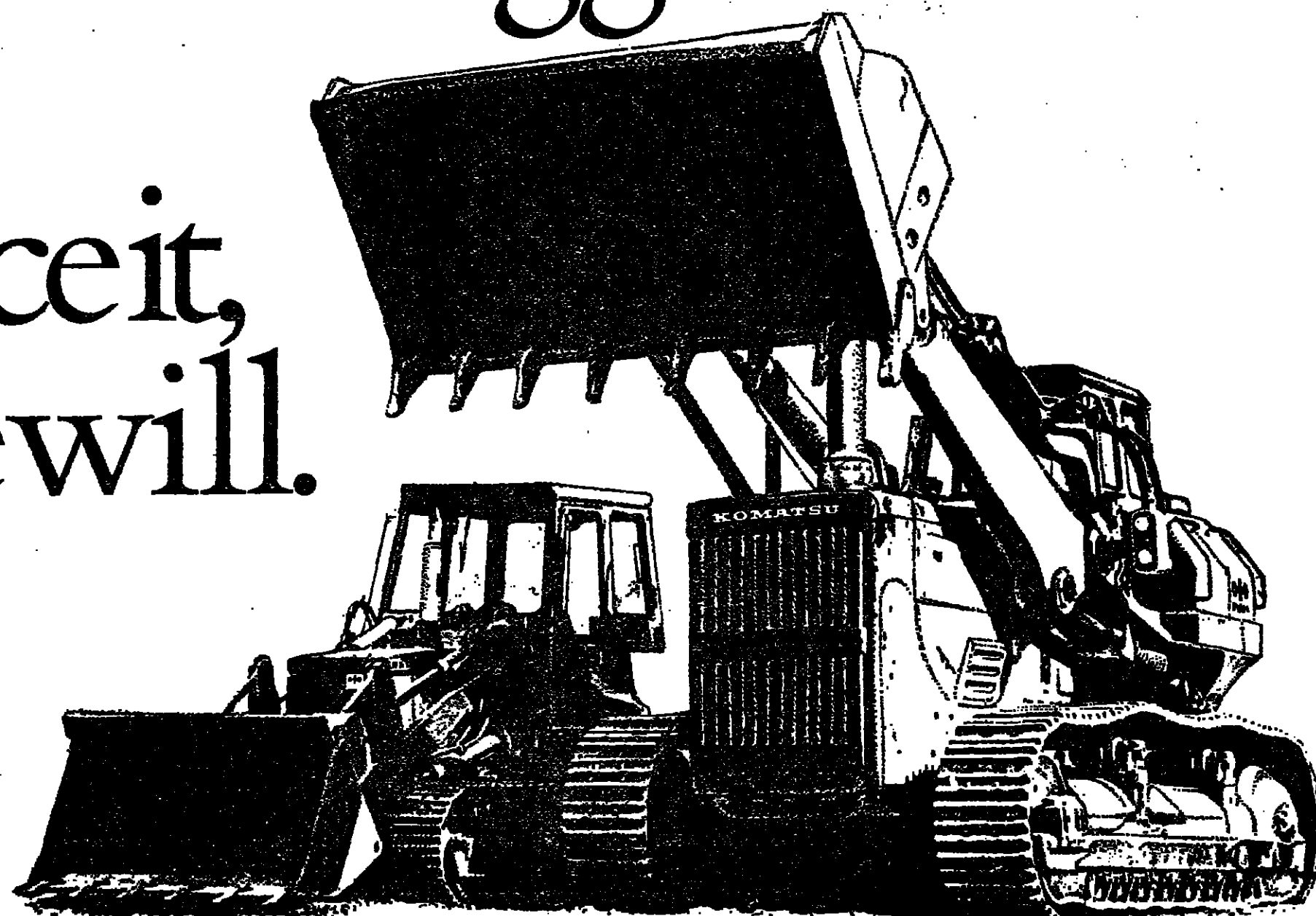
"The central problem of this industry is to increase its expansion plans in order to maintain its position in relation to the rest of the world and create a situation where both increased productivity and employment opportunity can be achieved."

While the crushing, pulverising and screening plant sector, with sales (in 1975) of £37m. representing a 5 per cent. share of total construction equipment sales, is a relatively small yet relatively successful part of the market, it clearly is included in the NEDC strictures. The products as the report concludes, are generally good, but the competition is keen.

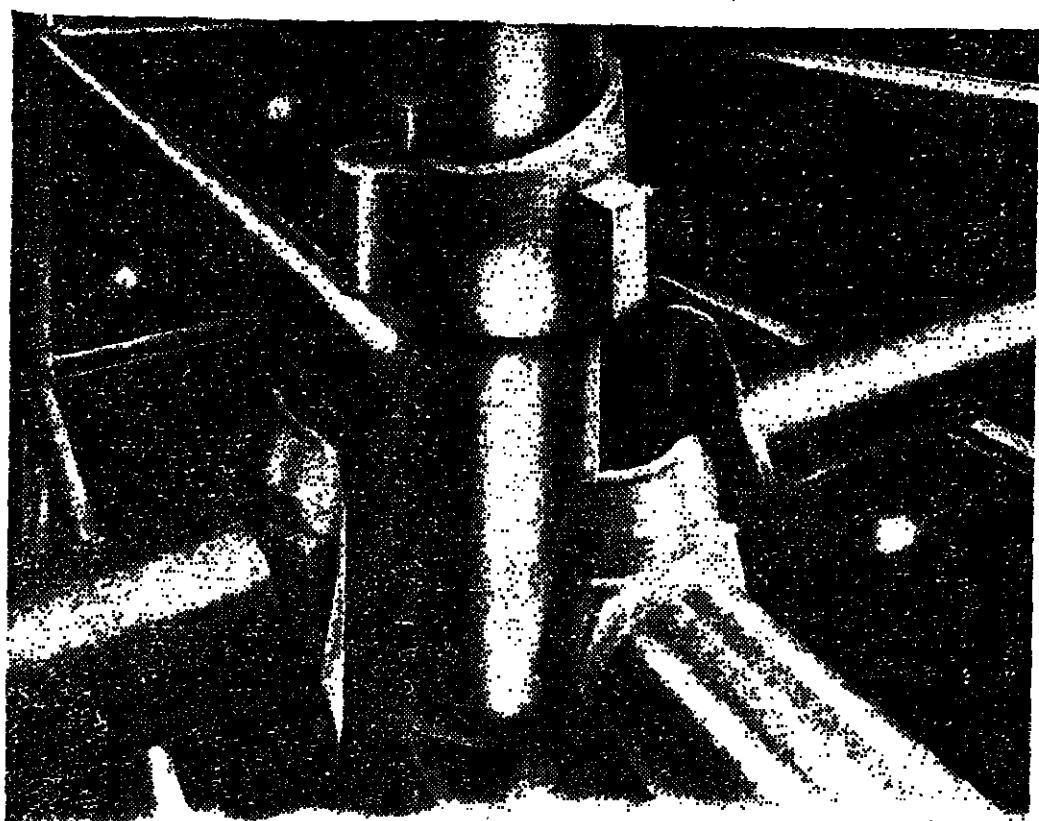
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GEOFFREY OWEN
looks at the world
market and the
prospects for the
leading companies.

CONSTRUCTION PLANT XII

The world scene

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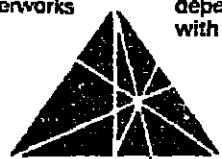
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construction equipment is our business

THE WORLD construction equipment industry presents a fascinating battleground in which about a dozen large American, European and Japanese companies are fighting for supremacy in virtually every significant market.

What makes the battle especially interesting is that the world market for construction equipment is in general an open one. In the main industrial markets there is little overt protectionism and not even much attempt by governments to favour their nationally owned suppliers in their public procurement. The principal customers are private enterprise contractors, some of which are themselves operating on an international scale. They are accustomed to look for the best buy, irrespective of the source of the product or the ownership of the supplying company.

A second feature of the industry is that economies of scale in manufacture are important. Although the numbers of units involved are small compared with, say, passenger cars - world demand for crawler loaders, for example, is probably around 50,000 units per annum - there are significant cost advantages for the company producing a few thousand units a year instead of a few hundred.

The structure of the industry is unusual in that it has one clear leader. Although Caterpillar does not dominate the field to the same extent as IBM does in computers, it is the market leader in most of the sectors where it competes. Its rivals freely acknowledge that Caterpillar has set standards in engineering, in production efficiency and above all in the strength of its dealer network - which everyone else is trying hard to emulate.

Network

Caterpillar differs from many of its competitors in devoting virtually its entire business to construction equipment; although it has diversified into fork-lift trucks and is an important supplier of diesel engines to the automotive industry, it does not have any stake in farm machinery.

It has a network of manufacturing plants in the U.S., in Europe and - through a partnership with Mitsubishi - in Japan; these plants are organised and managed on an integrated basis to secure the best possible economies of scale. As the accompanying table shows, the

THE MAIN CONTENDERS AND SOME OF THEIR PRODUCTS

	Backhoe loaders	Crawler loaders	Wheeled loaders	Hydraulic excavators	Heavy dump trucks	Graders	Scrapers
Caterpillar							
Komatsu							
Case/Inch							
John Deere							
Massey-Ferguson							
Inch, Harvester							
Ford							
Clark							
General Motors							
Fiat-Allis							
Volvo							
Orecon & Koppal							
Liebherr							
Budde/Daimler-Benz							
J. C. Bamford							
Loyd							
Hyvac (Powell Duffryn)							
Prismac (Acrux)							

The above chart, though not comprehensive, illustrates the competitive situation in some of the main sectors. There is a wide range of products within each sector, so that in, for example, wheeled loaders, companies may specialise in the heavier machines and not compete directly against those offering only the smaller equipment.

only high-volume sector in which Caterpillar is not represented is the backhoe loader (a product which shares some common components with the farm tractor) and there is often speculation that this gap will one day be filled.

Number Two in the world league, and a fierce rival to Caterpillar in products and in markets, is Komatsu of Japan. One important difference from Caterpillar is that it operates mainly from a Japanese manufacturing base. While it has entered into manufacturing ventures in countries which prohibit direct imports (such as Brazil and Mexico), Komatsu's attack on the North American and European markets has been conducted with products made in Japan.

For Komatsu the economies of scale which Caterpillar has sought on an international scale have been achieved largely within Japan; a network of factories, with components and machines rationalised between them, is the basis for Komatsu's manufacturing efficiency. If Komatsu is to increase significantly its share of North American and European markets a local manufacturing presence may at some stage become essential: the recent appreciation of the yen may force the Komatsu management to take the decision earlier than they would have liked.

The structural changes which have been going on in the rest of the industry can be seen as a series of manoeuvres aimed at catching up with Caterpillar. The strategies being followed can best be illustrated by four key events which have substantially altered the structure of the industry during the past three years.

The first was the creation in 1974 of a joint construction equipment company between Fiat of Italy and Allis-Chalmers of the U.S. Fiat had always been a major force in the European market, especially with its small crawler loaders and to a lesser extent with its hydraulic excavators. But it lacked the range of equipment which gave Caterpillar such an advantage in competing for customers and dealers; in particular it lacked the heavier machines which had been mainly developed in the U.S. In addition, it lacked a presence in the U.S. market itself. The pooling of interests with Allis-Chalmers, neatly solved most of these problems. It put Fiat in a position where it could challenge Caterpillar on its own home ground and put up a stronger fight in Europe itself.

The second event, in the same year, was almost the mirror image of the Fiat-Allis deal - the purchase by Massey Ferguson of the Hanomag construction equipment business in Germany. Here was a North American company, probably the world leader in farm machinery (certainly the strongest outside the U.S.), which had decided during the sixties to invest on a large scale in construction equipment. It had built new factories and developed new products, but the Hanomag purchase gave it a position in the European market which would have taken a very long time to develop on its own.

As Mr. Albert Thornbrough, president of Massey Ferguson, put it recently "Hanomag gave us much larger crawler loaders, crawler dozers and excavators and virtually a new range of wheel loaders. With the Hanomag purchase we acquired a proved product line which pulled our sales capability ahead by four years." Above all, the deal reflected Massey Ferguson's determination to become a "full-line" supplier,

able to provide its customers with all their requirements.

The Hanomag deal signalled the advance of the full-line North American company. Did it mean that the European specialist was doomed? That view seemed to be confirmed three years later when Poclain of France was forced into an alliance with another American concern, J. I. Case, a subsidiary of Tenneco.

Poclain was the outstanding example of the European specialist, which had built up a position of unchallenged world leadership in one major product, hydraulic excavators. Although other companies, including Caterpillar, had moved into the hydraulic excavator business, Poclain remained easily the world leader. Yet the recession of 1974-75 brought about a financial crisis. The company had over-extended itself and it urgently needed a new injection of funds.

After attempts by the French Government to find a domestic solution had failed, an agreement was reached with Case for the American group to acquire a 40 per cent stake in Poclain. Although the Bataille family, the original owners, had retained a substantial stake, and other French shareholders,

FIAT

AFTER SEVERAL years of intermittent courtship, the marriage between Fiat of Italy and Allis-Chalmers of the U.S. in construction machinery was settled in the middle of 1973. The two companies agreed to pool their construction equipment interests in a new enterprise, Fiat-Allis, which came formally into existence in 1974. Fiat held the majority stake, with 65 per cent of the equity; this was later increased, at the start of 1977, to 77 per cent.

J. I. CASE

J. I. CASE is a subsidiary of Tenneco, a huge American conglomerate whose interests include oil and gas production, natural gas pipelines, automotive components, chemicals, packaging and shipbuilding. One of the oldest American farm machinery companies - it began making threshers in 1842 - Case has been moving rapidly in the last few years to build up its stake in the world construction equipment business.

As in the case of Massey Ferguson, this has been achieved partly by acquisitions and partly by new product development. Just as Massey's purchase of Hanomag in Germany greatly strengthened its position in Europe, so Case's decision to acquire 40 per cent of Poclain, the French hydraulic excavator manufacturer, at a cost of \$40m., represented an important move in Case's worldwide strategy in construction equipment.

Before that deal, which was announced at the beginning of this year, Case had been putting considerable effort into other parts of the construction machinery market. In the backhoe loader market, particularly, the introduction of the 580F and the aggressive marketing which accompanied it was seen by its rivals as a sign of Case's determination to carve out a larger share of the business with a highly competitive range of products. This machine is built at Vierson in France and uses engines and transmissions supplied by David Brown in the U.K. David Brown was bought by Tenneco in 1972 and forms part of a network

Some observers predict Daimler-Benz and Caterpillar respectively in the business and the construction equipment business, are collision course - that pillar, already an important supplier of engines to the makers, will move direct truck manufacture. Daimler-Benz, seeking avenues for growth, will into Caterpillar's territory.

This is pure speculation, this stage, but Daimler-Benz now be regarded as a nucleus around which European construction equipment makers could be

These four transactions the way towards a rationalisation in construction equipment. It is argued the parallel with the industry should not be too hard, since the very requirements and of this is so much greater in the construction equipment business is probable, too, that a number of specialist companies will survive, especially in sectors where the volume business is too small to attract the attention of the large suppliers.

For the smaller manufacturers there may be little of co-operation, short of scale merger, which will them at least some economies of scale enjoy their larger rivals. But these qualifications have made it seems highly on that the list of main contenders which illustrates this will be the same in ten years as it is to-day.

More mergers of all along the lines of Case/Fiat and Massey-Ferguson/Harvester are probable; an example was Ford's purchase of Richier in France, designed to broaden American company's construction equipment line.

Deal

The fourth event, less widely publicised, was the purchase by Daimler-Benz of Germany of the Euclid earthmoving equipment business from its American parent, White Motor. Besides providing Daimler-Benz with its first manufacturing base in the U.S., this deal marks the German company's entry into the construction equipment business. Euclid, which has plants in Europe as well as the U.S., is one of the leading producers of heavy dump trucks; one of its main competitors is General Motors' Terex range.

Daimler-Benz could conceivably use this acquisition as a springboard for further expansion in construction equipment, possibly acquiring some of the German specialists in the field, structure of the industry.

How far the European companies will take the lead in rationalisation - as Fiat with Allis-Chalmers - is a matter of opinion. Volvo was one of the companies involved in the discussions over the future of Poclain; the two companies have a marketing agreement in Scandinavia. At the late J. C. Bamford of the U.K. to interest the French authorities in a European solution, a North American solution. But it is the American companies which tend to have longest purses; their effort to enlarge their share of the construction equipment business will continue to have a decisive influence on the structure of the industry.

FIAT-ALLIS IN 1976

	Fiat-Allis Inc.	Fiat-Allis
Sales	\$308m.	\$298m.
Net income (loss)	(\$11.7m.)	\$15.8m.
Number of employees	5,106	6,042

The logic behind the merger was clear. To compete effectively against companies like Caterpillar there are two main options. One is to specialise in a narrow range of products; the other is to become a full-line supplier, preferably on a worldwide basis. Allis-Chalmers had

a good position in the market and was especially strong in the larger machine. Fiat had long been one of the leading European construction equipment makers, with particular strength in crawler loader and dozers. The product range was complementary and pooling of resources would make it easier to attract deals of the highest calibre.

J. I. CASE IN 1976	
Sales:	\$1,348m.*
% of Tenneco sales:	21
Income before tax and interest:	\$104m.
Plants - in U.S.:	10
- outside U.S.:	10
No. of employees:	24,154
* About half in construction equipment.	

With sales of over \$600m. more than 11,000 employees, Fiat-Allis has a total of six factories - three in Italy, two in the U.S., one in the U.K., one in Brazil. In line with established patterns in industry, production of machines and components are to a large extent rationalised between them.

In 1972 Tenneco acquired CALSA in Spain, the leading Spanish producer of one-wheeled loaders. In the same year a controlling interest was acquired in Wilhelm Weller of West Germany, one of the largest suppliers of medium-sized vibratory compacting equipment.

Case is the U.S. market leader in backhoes and now offers in Europe a wide range of equipment, some manufactured locally and some imported from the U.S. Apart from the hydraulic excavators, manufactured by Poclain in France, Case makes crawler loaders and dozers in the U.K., backhoe loaders in France, and wheeled loaders in Spain. With the exception of the Davis Division trenching equipment, over 90 per cent of Case product sold in Europe is manufactured in five European plants. Total sales in Europe for Case this year are expected to be about \$300m.

In the U.K. the Essent factory in Stamford, Lincolnshire, had originally been acquired by Allis-Chalmers in 1950 for the manufacture of farm machinery. Ten years later Allis-Chalmers started making wheeled loaders at Essent and this became the factory's main line, with a wide range of machines and a substantial export trade. When Fiat-Allis took over the factory has made the European production centre for articulated wheel loaders, producing in excess of 1,000 units per annum.

The three Italian factories, Grugliasco, Lecce and Casale, specialise in respectively hydraulic excavators, crawler loaders and graders. The factories in Illinois produce bigger machines, including scrapers and graders and larger crawler loaders and wheeled loaders.

The Fiat-Allis partnership consists of two legal entities, Fiat-Allis Inc., a U.S. corporation, and Fiat-Allis BV, a Dutch company. The latter, in turn, incorporates the Davis Division trenching equipment, over 90 per cent of Case product sold in Europe is manufactured in five European plants. Total sales in Europe for Case this year are expected to be about \$300m.

CONSTRUCTION PLANT XIII

JOHN DEERE

JOHN DEERE, the largest of North American tractor and machinery companies, was a few years ago a less familiar name in Europe than Massey-Ferguson and International Harvester. Although Deere bought a German company, Lanz, in Mannheim in 1956, its operations produced a satisfactory return for years. In 1971 the company attempted to make up for time by agreeing to pool its machinery interests with Fiat, but that arrangement came to nothing. Since Deere has pushed ahead strongly on its own.

JOHN DEERE IN 1976

Sales by area	\$m.	% of total
U.S.	2,160	69.0
Outside U.S.	974	31.0
Sales by product		
Farm equipment	2,523	80.6
Industrial equipment	452	14.4
Consumer products	159	5.0
Total sales	3,134	100.0
Net income	242	
Number of employees	55,242	

In 1974 a number of new models were unveiled, including crawler loaders, excavators, scrapers and graders with higher horse power than those which Deere had traditionally manufactured. Mr. William A. Hewitt, chairman of the company, said at the time that the company aimed to achieve sales of \$1bn. in construction equipment by 1980; this year sales have been running at an annual rate of around \$800m. A new factory was built on a greenfield site at Davenport, Illinois, near the company's home base in Moline, and this came on stream last year. Together with the enlargement of the existing factory at Dubuque, Iowa, the space available for manufacturing industrial equipment has doubled in the past three years.

MASSEY FERGUSON

MASSEY-FERGUSON followed a more consciously international policy during the 1960s than its North American rivals in the farm machinery industry, and it has an exceptionally strong manufacturing base in Europe. Last year 75 per cent of the company's tractor production came from its factories in Europe—half in the U.K., a quarter in France and the remainder divided between Germany, Italy and Spain. Similarly in construction equipment, Massey-Ferguson has built or acquired a number of factories in Europe: the biggest of these is the former Hanomag factory in Hanover, acquired in 1974.

Like other tractor producers, Massey-Ferguson first entered the construction equipment market with the backhoe loader, which shares some common components with the farm tractor: this is a high volume sector of the market in which Massey-Ferguson has a strong market position in the U.K., shorter time than could have been achieved by internal product development. Steps have been taken to rationalise production so that Hanover now produces the range of wheeled loaders and crawler loaders and dozers over 100 horsepower, while in Italy the Aprilia and Ravenna factories produce the whole hydraulic excavator range and crawler loaders and dozers under 100 hp. Massey-Ferguson's construction equipment production draws on components used in farm machinery, notably of course, Perkins diesel engines. Mr. Albert Thornborough, president of Massey-Ferguson, said earlier this year that 29 new products would be launched in the U.K. the first concentrating mainly on crawler loaders and hydraulic excavators, the latter on backhoe loaders and wheeled loaders in market share would be achieved. "Our long range planning in 1974 which pushed Massey-Ferguson into the front rank of European construction equipment manufacturers. Hanomag's Massey-Ferguson to \$750m., almost twice the level it achieved in 1976."

MASSEY-FERGUSON IN 1976

Sales by area	\$m.	% of total
North America	855	30.9
Europe	890	32.1
Rest of world	1,027	37.0
Sales by product		
Farm machinery	2,001	72.2
Industrial and construction machinery	380	12.7
Engines	340	12.3
Other	51	1.8
Total sales	2,772	100.0
Net income	118	
Number of employees	68,200	

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KOMATSU

KOMATSU, widely regarded as the world's strongest rival in the construction equipment market, is the largest manufacturer of construction equipment in Japan. Like Caterpillar, it has concentrated most of its efforts in this sector. Its significant diversification into the manufacture and supply of machine tools and power equipment (notably for the motor industry), and casting and forgings, but this can only be regarded as a true diversification since it has emerged naturally from its main manufacturing business and engineering know-how.

Unlike the Japanese car manufacturers, Komatsu is unlikely to be forced by protectionist pressures into local manufacture in North America or Europe. The company has deliberately spread its export efforts widely around the world, avoiding an undue concentration on any one market; about 20 per cent of its exports go to North America and about the same proportion to Western Europe. In any case the volume and visibility of imported construction equipment are hardly comparable to cars or TV sets. More significant for Komatsu is the appreciation of the yen against the dollar.

Komatsu's management regularly reviews the economics of overseas manufacture in the light of production costs, currency movements and marketing considerations. Some Japanese exporters had tended to regard a rate of ¥280 to the dollar as something of a critical point in these calculations: since the yen now appears to have broken decisively through that barrier the case for overseas manufacture may have been strengthened. In any case, it seems likely that if Komatsu wishes to establish itself on a significantly larger scale in Europe, it will need at least one stage a manufacturing presence in the market, just as the American multinationals have done.



Komatsu HD320 35-tonne dump truck working in a limestone quarry in South Wales.

INTERNATIONAL HARVESTER IN 1976

Sales by area	\$m.	% of total
U.S.	2,458	63.0
Outside U.S.	2,030	37.0
Sales by product		
Trucks	2,310	42.1
Farm machinery	2,262	41.2
Construction and industrial equipment	668	12.2
Turbo machinery	247	4.5
Total sales	5,438	100.0
Net income	174	
Number of employees	97,550	

INTERNATIONAL HARVESTER

INTERNATIONAL Harvester spread its efforts among several major lines. Although it is the leading U.S. producer of heavy-duty trucks, it has generally run behind John Deere in the U.S. farm machinery market and some way behind Caterpillar in construction equipment. As a full-line supplier, backed by considerable investment in local manufacturing facilities, International Harvester has long been a major force in the international construction equipment market.

In Europe the company has factories in the U.K., Germany and France which manufacture a wide range of equipment. It is especially strong in crawler loaders: last year saw the introduction of an important new model, the 165 crawler loader with a 14 cubic yard capacity, designed and manufactured in the U.K. for world markets. The U.K. is the main manufacturing centre for backhoe loaders and International Harvester had the crawler loaders, Germany for disadvantages of size and four-wheel-drive loaders and diversification, but few of the France for hydraulic excavators, advantages. In contrast to Caterpillar's specialisation, graders and scrapers, are supported by International Harvester had plied from the U.S. factories.

CATERPILLAR IN 1976

Sales by area	\$m.	% of total
U.S.	2,097	41.6
Outside U.S.	2,945	58.4
Sales by product		
Construction and materials handling equipment	4,555	90.3
Other*	487	9.7
Total sales	5,042	100.0
Net income	383	
Number of employees	77,717	

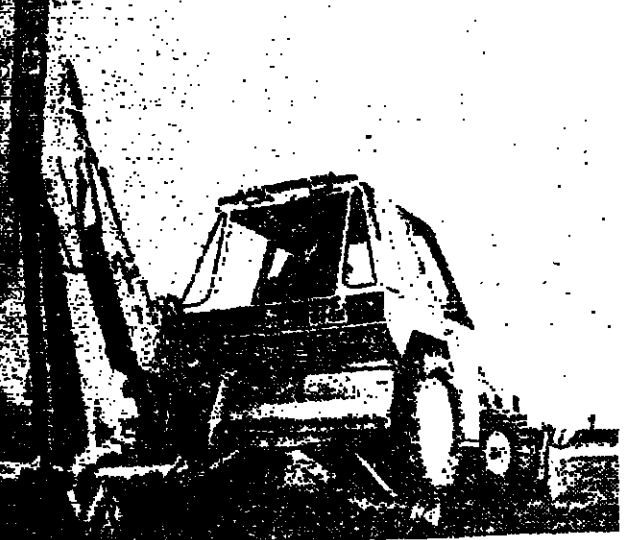
one plant is the counterpart of the same machine made at any other plant; parts are interchangeable throughout the world.

In the last few years Caterpillar has taken steps to strengthen its position at the smaller end of the construction equipment market. The entry into hydraulic excavators was one example, and Caterpillar has used its Japanese affiliate company (jointly owned with Mitsubishi) as the source for some smaller crawler and wheeled loaders for European and other markets.

KOMATSU IN 1976

Sales by area	\$m.	% of total
Japan	811	58.8
Outside Japan	566	41.2
Sales by product		
Construction machinery	1,025	74.5
Industrial vehicles*	93	6.7
Industrial machinery†	48	3.5
Others	210	15.3
Total sales	1,377	100.0
Net income	51	
Number of employees	22,599	

* Mainly forklift trucks.
† Mainly presses and machine tools.



The International Harvester 3500 loader backhoe, built at Doncaster, which is meeting with good response in export markets.

CATERPILLAR

MANAGEMENT of Caterpillar decided some 50 years ago the way to succeed in the construction equipment business was to specialise in it. Unlike domestic rivals such as International Harvester and John Deere, Caterpillar stayed out of the machinery and has never been tempted by the diversification of its sales last year were in construction machinery, engineering and materials handling equipment; the bulk of the business of diesel engines, where Caterpillar is an established supplier to many manufacturers and other owners outside the construction equipment field.

1965 with the purchase of Townmotor. Normally Caterpillar has relied on its own product development to fill any gap in the range: in hydraulic excavators, for instance, a product that which had been pioneered and largely developed in Europe. Caterpillar might have acquired one of the existing European suppliers, but it preferred to develop its own machines: they were introduced in 1973.

Caterpillar is one of America's biggest exporters, but since the mid-1970s these direct exports have increasingly been supplemented by a network of plants throughout the world. In Europe the first manufacturing plants were established in Newcastle and Glasgow in 1956. A few years later plants were built at Grenoble in France, Gosselies in Belgium and at Leicester.

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On these two pages
KENNETH GOODING
reviews the structure
of the U.K. industry.

Britain's main groups

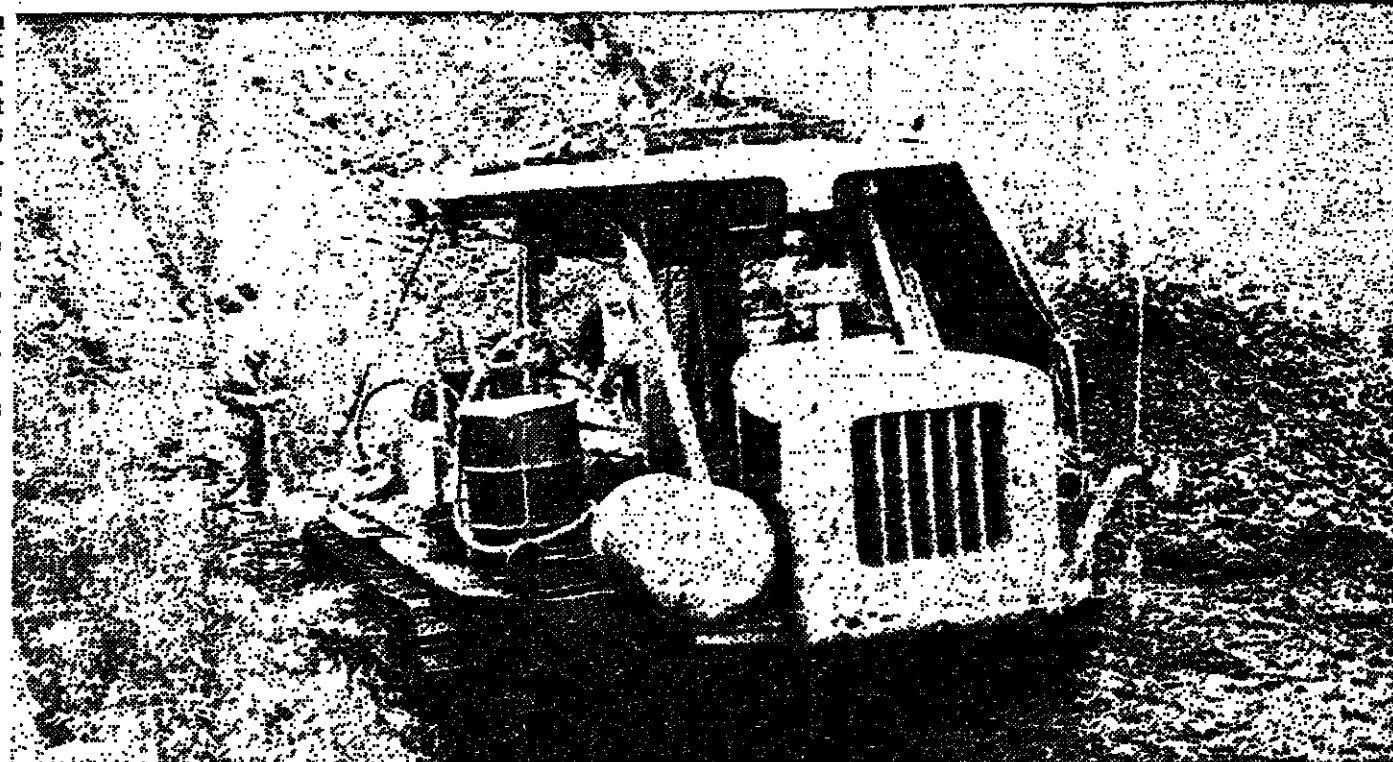
THERE ARE 170 companies in the U.K. which make and market equipment used in construction, civil engineering, open-cast mining and quarrying. But, as is usual in mechanical engineering, a small number of large companies are responsible for most of the activity. In the case of construction equipment, 17 companies account for 80 per cent. of the industry's sales and 75 per cent. of the employment.

The 17 are Acrow, which owns Coles Cranes and Priestman, Babcock and Wilcox, through its subsidiaries Blaw-Knox, Muir-Hill and Winget, J. C. Bamford, Barber-Greene, J. L. Case, Caterpillar, Fiat-Allis, Grove-Allen, General Motors Scotland, Hymac (owned by Powell Duffryn), International Harvester, Jones Cranes, a 600 Group offshoot, Leyland Special Products (Aveling-Barford, Aveling Marshall and Goodwin Barsby), Massey-Ferguson, Frederick Parker, Ransomes and Rapier and Ruston-Bucyrus.

This list throws into sharp perspective the importance of foreign-owned companies in this sector, particularly the North American construction equipment manufacturers from North America not having a base in Britain is John Deere. Clark Equipment is not on the list but it has a foothold in the U.K. through its 50 per cent. holding in Cosmos Cranes, a company which makes mobile cranes.

It is estimated that the nine foreign-owned concerns listed control around 80 per cent. of the U.K.'s construction equipment sales and account for more than half the exports. Eight of the companies are wholly owned by their foreign parents—Case, Caterpillar, Fiat-Allis, Grove-Allen, General Motors Scotland, International Harvester and Massey-Ferguson. The ninth, Ruston-Bucyrus is 51 per cent. owned by Bucyrus Erie of North America with GEC having the rest of the shares.

Another feature of the U.K. construction equipment industry revealed by the "top 17" list is its closeness in many respects to the agricultural equipment industry. Crawler tractors, in-



Hymac Cleveland trencher working on pipeline trenches.

dustrial wheeled tractors and wheeled shovels all have their origins in farm machinery and continue to share some of its technology. A number of the major international construction equipment manufacturers with a broad product line are therefore also makers of farm machinery and diesel engines. This combination brings opportunities for the transfer of technology and more complete and intensive use of sales and service organisations.

Turn to the eight U.K.-owned companies on the list and it becomes apparent that in most cases these construction equipment businesses are contained within larger engineering groups.

Sometimes the development of the construction equipment divisions was a haphazard affair. But in recent years for some companies it has been much more a deliberate policy. Take the example of Jones Cranes. The 600 Group's involvement can be traced back to 1928 when what was then called George Cohen bought K and L Metal Works.

It was K and L which made the first Jones crane in 1936. The next acquisition did not take place until 1968 when 600 bought British Hoist and Crane, the "Iron Fairy" concern. This was followed in 1971 by the merger of Jones' own chassis-making company with Vickers Allwheel Drive, a merger which produced a concern which went on to make the first rough terrain crane.

The activities of the Indus-

trial Reorganisation Corporation in the 1960s also played a part in the way the construction equipment industry is currently structured. The IRC helped put together the Steel Group (owners of Coles Cranes, the leading U.K. producer of mobile cranes) and Priestman Brothers who put their crane interests together.

Then in 1972 Acrow was looking for a change of direction. Up to that time its chairman and major shareholder Mr. William de Vigier had been selling products to the construction industry but his philosophy was that anything Acrow made must be capable of being "made, sold and forgotten."

Not for him the service back-up demanded of construction equipment. But Mr. de Vigier had to change his tactics—or his group would have failed to continue to grow at the same pace. In the event he made a successful offer for the Steel Group which had received unwelcome overtures from a Slater Walker offshoot and preferred more friendly arms. After the merger the mobile crane business was separated from the fixed crane and hoist activities.

There are other U.K. companies now important in the industry which at one stage seemed almost certain for extinction. Ransomes and Rapier of Ipswich in 1972 was deeply in the red and its parent company at that time, Newton Chambers, was preparing to run it down. The closure was delayed by local protests and then by a bid for Newton

Chambers itself from the Central and Sheerwood Trust conglomerate. Central and Sheerwood put in a new chief executive and gave approval for an investment programme involving the redesign of the factory layout and the production processes.

Rationalisation of the product line, leaving Ransomes and Rapier with crawler cranes, hydraulic cranes and truck concrete mixers in its product range, and an attack on exports

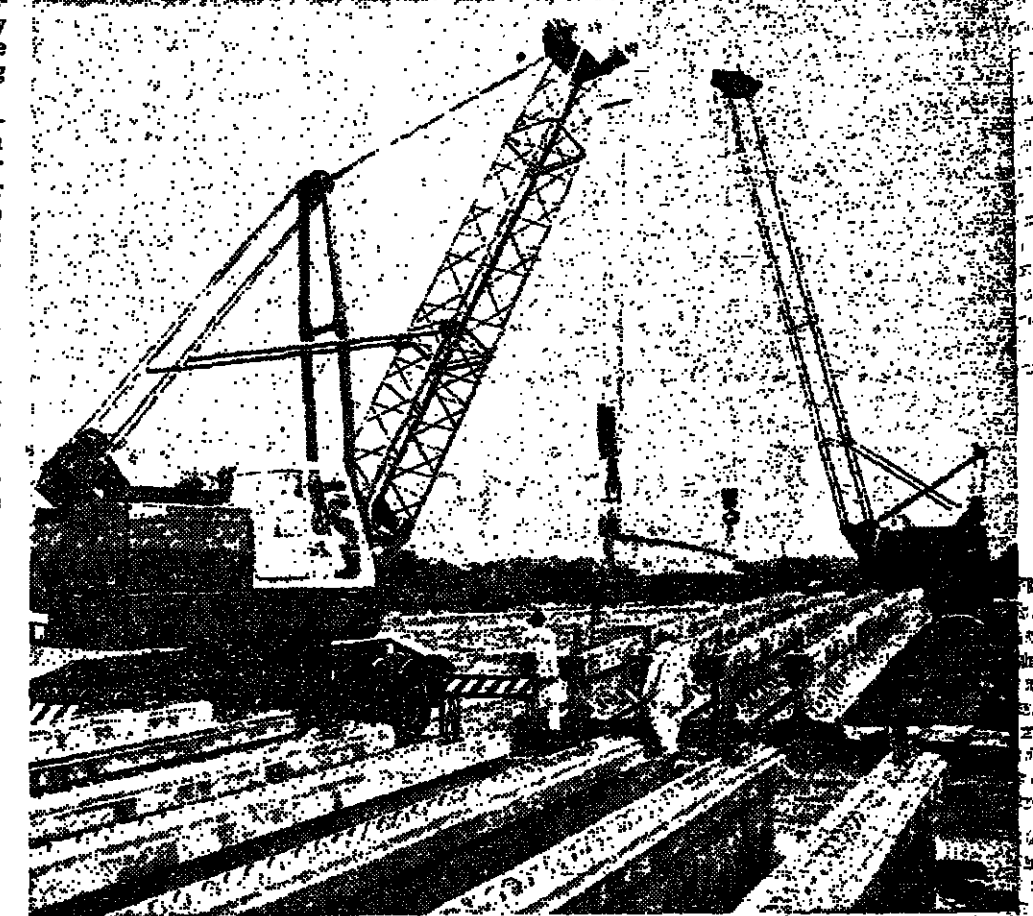
brought big rewards. In 1976 Ransomes and Rapier accounted for £2.6m. of Central and Sheerwood's total pre-tax figure of £3.3m. Not only that, Ransomes has got back into the market for "walking draglines" for the open cast coal mining industry. These monsters are 55 feet long, have one arm which extends over 100 yards and can gulp 50-ton chunks of coal at one go. The company built 55 of these monsters between 1939 and 1964

and is one of four groups in world with the current ability to make them. Ransomes is now back in this market because the old crisis has completely changed the fortunes of the coal mining industry, thus for the equipment manufacturers who supply it.

Another company whose previous parent announced its intention to close only for a year or so to revitalise it, was Man Fowler, now known as Aye Marshall. The former of Thos. W. Ward, was about close MF's factory at Gborough, Lincolnshire, in and the U.K. would have its last British-owned manufacturer of crawler tractor result.

But Leyland Special Products itself given a new lease of life after the Government's rescue of British Leyland in MF a chance to acquire production space in a Special Products paid £2.6m. MF and is currently in throes of a £5m. modernisation and re-equipment programme Gainsborough. The 800 have been saved and the has been given new pro to make alongside the shovels and crawler tractor

Closely related to the construction equipment sector is plant hire. There are 2 U.K. companies sharing estimated combined turnover around £500m. This is like the construction equipment industry itself, employing 40,000 people and accounting for 70 per cent. of U.K. demand for construction equipment. The plant hire companies are also thought to own 75 per cent. of the construction equipment in use in Britain.



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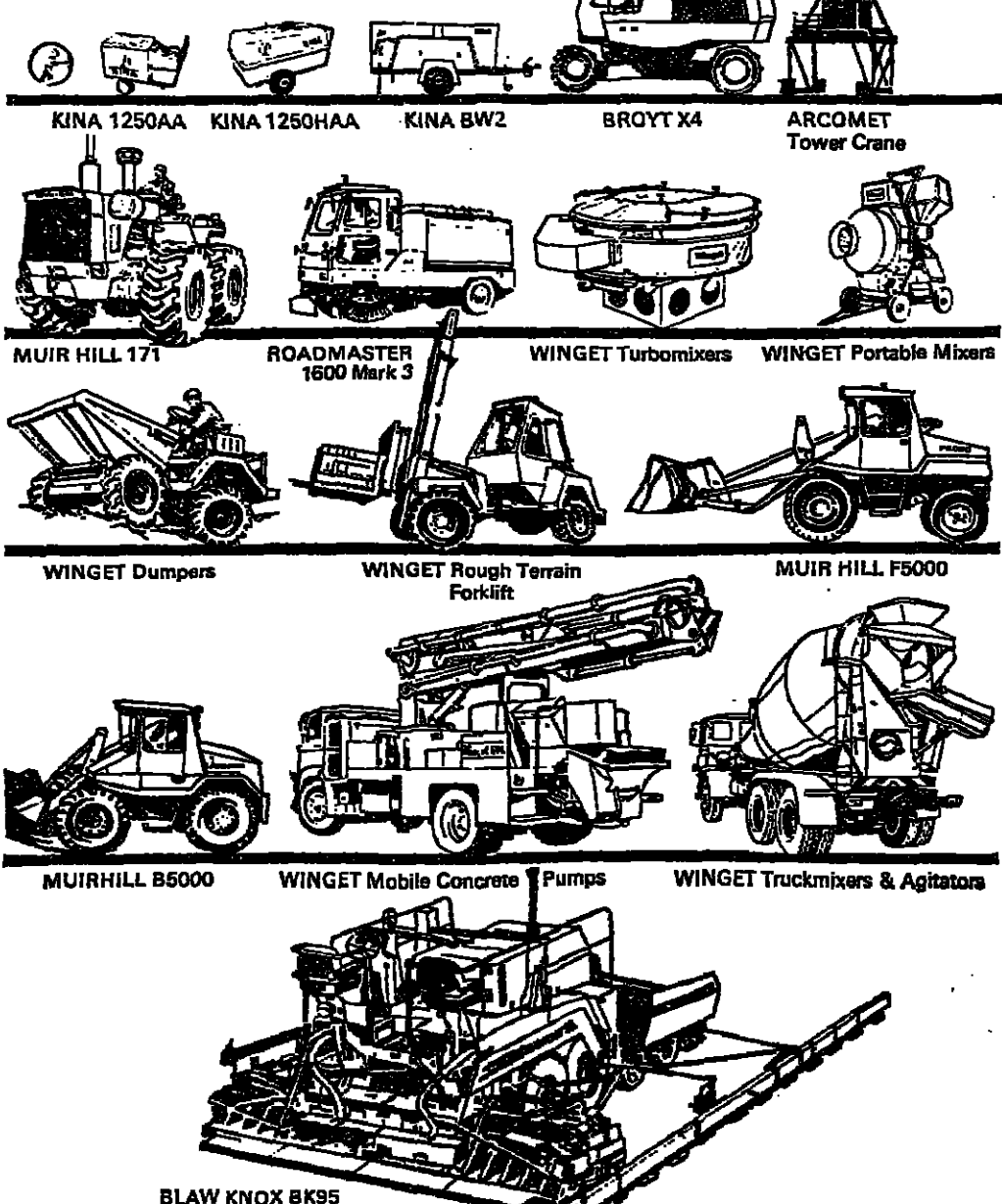
Blaw Knox Pavers and Sweepers. Winget Concrete production and handling plant, dumpers, rough terrain forklifts and Dynapac vibration equipment.

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JONES CRANES

JONES CRANES is a 600 Group subsidiary, together with George Cohen Machinery, which markets the HLAB range of lorry loaders. Last year it made profits of £2.6m. on a turnover of £27m. compared with £1.7m. and £24.5m. respectively.

Jones has three factories. The main works at Letchworth, Herts., makes the diesel-mechanical strut jib cranes (Jones pioneered the development of the diesel-mechanical crane, producing the first at Letchworth in 1938). Small hydraulic mobile cranes are produced at the works in Compton, Berks., together with a range of builders' hoists and scaffold cranes. The larger capacity rough-terrain and truck-mounted cranes are made at South Marston near Swindon, Wilts.

The Compton works was the home of the Iron Fairy cranes and at Swindon the Vickers All-wheel Drive chassis and crane carriers were manufactured. Now all the three companies operate under one name—Jones Cranes.

Well over two-thirds of Jones' production is exported and in addition a joint venture with the Iranian Development and Renovation Organisation markets and

makes Jones cranes in Iran. This venture has made a significant contribution to profits in 1977, its first year of operation.

In his report in June this year, the 600 Group chairman Sir Jack Wellings reported that the crane companies' performance had shown a "substantial improvement" and they had been "most successful in increasing penetration of existing and new markets." He also remarked that "development of the strut and hydraulic telescopic cranes continues at a fast pace."

Behind this latter comment is the fact that in the past two years Jones has produced a range of lightweight diesel-hydraulic mobile cranes with telescoping jibs; 40-ton capacity diesel-mechanical cranes in mobile, crawler and high-level-boom types and the first 15-ton, fast-travel, rough terrain crane with swivel cab and all-round load slew.

On the lorry loader side of the 600 Group activity, George Cohen Machinery is sole agent for the U.K. and Ireland for the HLAB range and several 600 companies throughout the world act as distributors for this Swedish-built product.

HYMAC

HYMAC is a member of the Powell Duffryn Group; turnover for 1976-77 was £30m. or 10 per cent. of PD's total sales. It employs 1,400, including 316 in parts and service support.

Hymac was the first U.K. maker of hydraulic excavators, the first machines being built in 1962. Its factory is at Rhymney, South Wales, where a major capital investment programme is in progress.

The marketing division, which employs 440, has its headquarters at Newbury. A direct sales and service operation works out of 21 centres throughout the U.K.

Hymac makes the 370C

excavator loader and a range of hydraulic excavators at Rhymney, plus a materials handling derivative. It claims that in 1976 it accounted for 30 per cent. of the total U.K. market for the machines it makes.

Some 56 per cent. of new machine sales were exported in that year. There is a distribution subsidiary in Sweden.

Hymac also handles sales in the agricultural and construction markets for the Overlander 45 rough terrain forklift truck made by Coventry Climax. It distributes throughout the U.K. and Ireland a range of hydraulic excavators made by the West German concern Demag.

BABCOCK AND WILCOX

BABCOCK AND Wilcox bought Winget (which had previously merged with Gloucester) in Blaw-Knox. Muir Hill Wagon) it agreed to do so. Muir Hill had already joined the last major acquisition took place five plants. Exports account for nearly 80 per cent. of output.

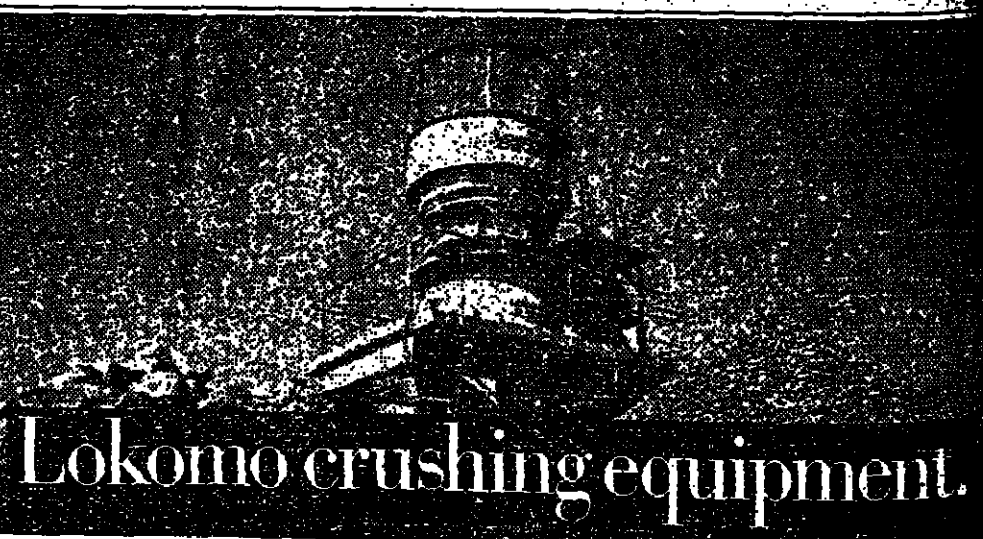
Babcock entered the construction equipment manufacturing world leader in the manufacture of black-top pavers. Around 90 per cent. of its assets are the U.S. group and Riche involved in this business but it also has a unit making road sweepers. There is also a distribution arrangement with the French tributorship which imports the Marion walking draglines and the Riche tower cranes. Winget's main plant is also at Rochester. It makes concrete machinery, from the very

large batching plants for building to the smallest mixer. It also makes, in association with Dynapac of Sweden, vibration-compaction equipment (larger machines are imported from Sweden).

Muir Hill manufactures shovel loaders and his powered four-wheel-drive tractors aimed principally at the agricultural market.

At Gloucester, another subsidiary Slater and Engle makes dumpers and rough terrain fork-lift trucks for Winget to market.

Eighteen months ago Babcock set up Babcock-Kina, at Ipswich which makes high-pressure water jet systems.



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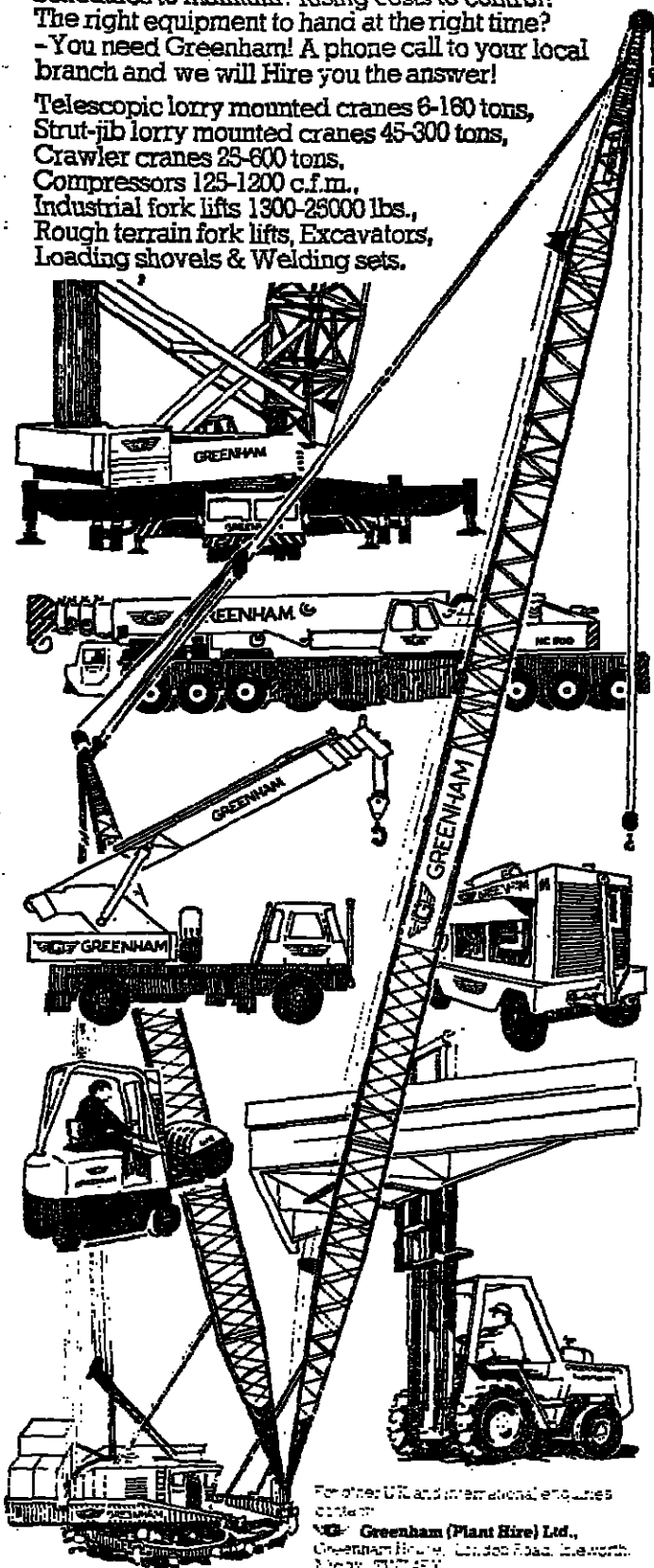
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THE CHANCELLOR'S measures to aid the construction industry, unveiled as part of his latest economic package, will have been as warmly welcomed by plant hirers as by other sectors of building and civil engineering, despite the usual strictures by some that Mr. Healey may have done too little too late. For plant hire, a relatively new industry but until recently one of the fastest growing in the country, is now deeply affected by the same recession that has so seriously hit its main customers, the builders and civil engineers.

The very factors that have accounted for its growth rate successfully insulated it for a while. In times of depression builders tend to turn still more to hiring plant as an alternative to buying their own, thus reducing the amount of hard-to-find cash tied up in assets they may not be able fully to utilise.

Hiring lets the builder get on with the job he knows best, building, rather than having to choose and service plant and, in the case of things like cranes and other operated plant as opposed to items like compressors which are basically non-operated, find and train the men to run it too. The hirer's returns are also better for he can move his equipment from site to site as it is required rather than having to let it stand expensively idle for what might be long periods after specific jobs are completed.

Hiring also frees the builder from the burden of being responsible for meeting safety requirements in respect of plant and of bearing maintenance costs, which can be very heavy indeed.

But inevitably the downturn has worked its way through. The industry has seen no major bankruptcies like those experienced among its customers, but there have been some substantial falls in profits—with spectacular exceptions as well—with turnover often remaining static (at a time of heavy inflation) or declining.

This in turn has led to intensified competition as companies have reduced their hire rates in a bid to secure better utilisation of plant. At the same time the problems of the

CONSTRUCTION PLANT XVI

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Poclaim 1000CK—the largest hydraulic excavator in the world—working on one of Shand's opencast coalmining sites in South Wales.

construction industry have caused an increase in the volume of bad debts faced by hirers. Many of those hirers are themselves small companies not necessarily easily able to cope with these sorts of pressures. In all, there are some 1,400 hire companies active throughout Britain. Together they are estimated to have £280m. invested in plant, with £280m. of that accounted for by the top 50 and the remainder 40 per cent. shared by the remainder.

None of that top 50, however, is especially large compared with the major civil engineering contractors. Thus George Wimpey alone has a plant fleet larger than that of the three major hirers combined, and a recent study by stockbrokers Greene and Co. estimates the gross cost of the plant fleet of the top ten construction companies at £281.63m., with another £48.41m. accounted for by hirers owned by construction companies, and the top ten independent hirers responsible for £153.73m.

Not only is the industry relatively small in terms of the construction industry's overall investment in plant; it also tends to be somewhat localised. Indeed only one non-contractor-owned hirer can be said to be truly national in its operations. This is Hewden-Stuart Plant, the biggest of the hirers, with pre-tax profits of £2.24m. on a turnover of £29.6m. in the six months to the end of July against £1.65m. and £26.5m. respectively a year before. Hewden-Stuart, with its origins firmly rooted in Scotland, perhaps typifies the way so many individual companies have grown basically through a series of strategic acquisitions—its purchase of A. Gunn last year was the one which gave it a full national operation—and the whole sector has been notable in recent years for the amount of takeover activity within it.

Thus the past 12 months have seen Transport Development Group take over H. Cox; Carlton Industries (a subsidiary of

London Merchant Securities) gain full control of Bristol Plant; Y. J. Lovell acquire both Francis Plant and, from Ready-Mixed Concrete, RMC Plant; M. J. Engineers acquire Pace Plant; and Hewden-Stuart's Southdown Plant subsidiary buy London Compressor Plant from one of its chief rivals, Richards and Wallington.

The involvement of diversified groups in plant hire—and a very substantial involvement it is too in the case of companies like British Electric Traction and Lex—shows the importance attached to the industry by concerns whose main interests lie well away from construction and civil engineering.

It is evident too in plant hire's innovative influences on the construction industry. It is the presence of companies like, for example, crane hire specialists Richards and Wallington, G. W. Sparrow and the BET subsidiaries J. D. White and Greenham Plant that has brought new

varieties of crane into operation in the U.K.—cranes which would have been hopelessly uneconomic purchases for individual contractors, with their limited scope for full utilisation, but which make a great deal of sense in the hirer's hands. Indeed, much of what has been achieved in North Sea development has been made possible only by the hirer's ability to innovate new plant.

North Sea development itself has been important in the success enjoyed by several of the major hirers, providing a considerable proportion of the turnover enjoyed, for example, by the two biggest crane hirers, Sparrow and Richards and Wallington. Here, however, the peak of activity is probably over, giving those hirers with heavy involvement the seeds of another future problem. Meanwhile, the industry has its more immediate problems.

With hire rates depressed (though there seldom seems to have been a time when the industry did not feel that to be the case) vital investment in new plant has to go by default, despite the advantages given by recent falls in interest rates. The situation was well summed up by Mr. Frank Jamieson, Hewden-Stuart's chairman, in his 1977 annual report published in May.

He said: "Recently one of our competitors reported that hire rates for smaller machines were, despite inflation, below the level of two years ago and that he was receiving from the same site a higher hourly rate for a skilled joiner than he was for a £12,000 machine complete with experienced operator."

Under these conditions many plant hirers across the country have sold their equipment, often for export, and withdrawn from the market. This pattern will continue until such times as the volume of plant available matches the reduced level of work."

The latest initiative in the hirer's trade association may bring some sense to the end of last week's launching of a series of cost-cutting measures which will enable hirers, for the first time to have an accurate picture of the real current of owning, operating, and placing various types of plant.

The sad fact is that the smaller companies in rate cutting, perhaps those that flourish out of the industry's downturn—and their fortunes at any given time whether they are profitable until it is too late—then not only being selves heavily into the competition, who have forced to reduce charges.

The association's hope, its cost studies—which perhaps those that flourish out of the industry's downturn—and their fortunes at any given time whether they are profitable until it is too late—then not only being selves heavily into the competition, who have forced to reduce charges.

One brave attempt to way out came a year ago Sparrow's \$5m. (£2.8m.) lease of the crawler crane and heavy lifting equipment McDonough Corporation U.S., which was active in America—but in Canada, the Far and East.

Sparrow's U.S. move was the first overseas foray of U.K. plant hire, but it rank as one of the ambitious. The key to overseas appears to be specialise with the concept of hi-peculiarly British general appear unlikely to be secure much benefit by up abroad.

So that leaves the large of the industry firmly in this country, seeing in severe difficulties after a period of growth but a same time by no means run out of steam yet. Estimation will continue, it would be surprising if next or 1979 did not see immediate advantages for the construction industry bring a substantial revival in the fortunes. Those large companies whose performance weakened in the past year should move back onto a substantial growth trend while smaller localised companies specialists in terms of rather than equipment, will probably do well. The cord for their customers, however likely to be a big rise in charge levels.

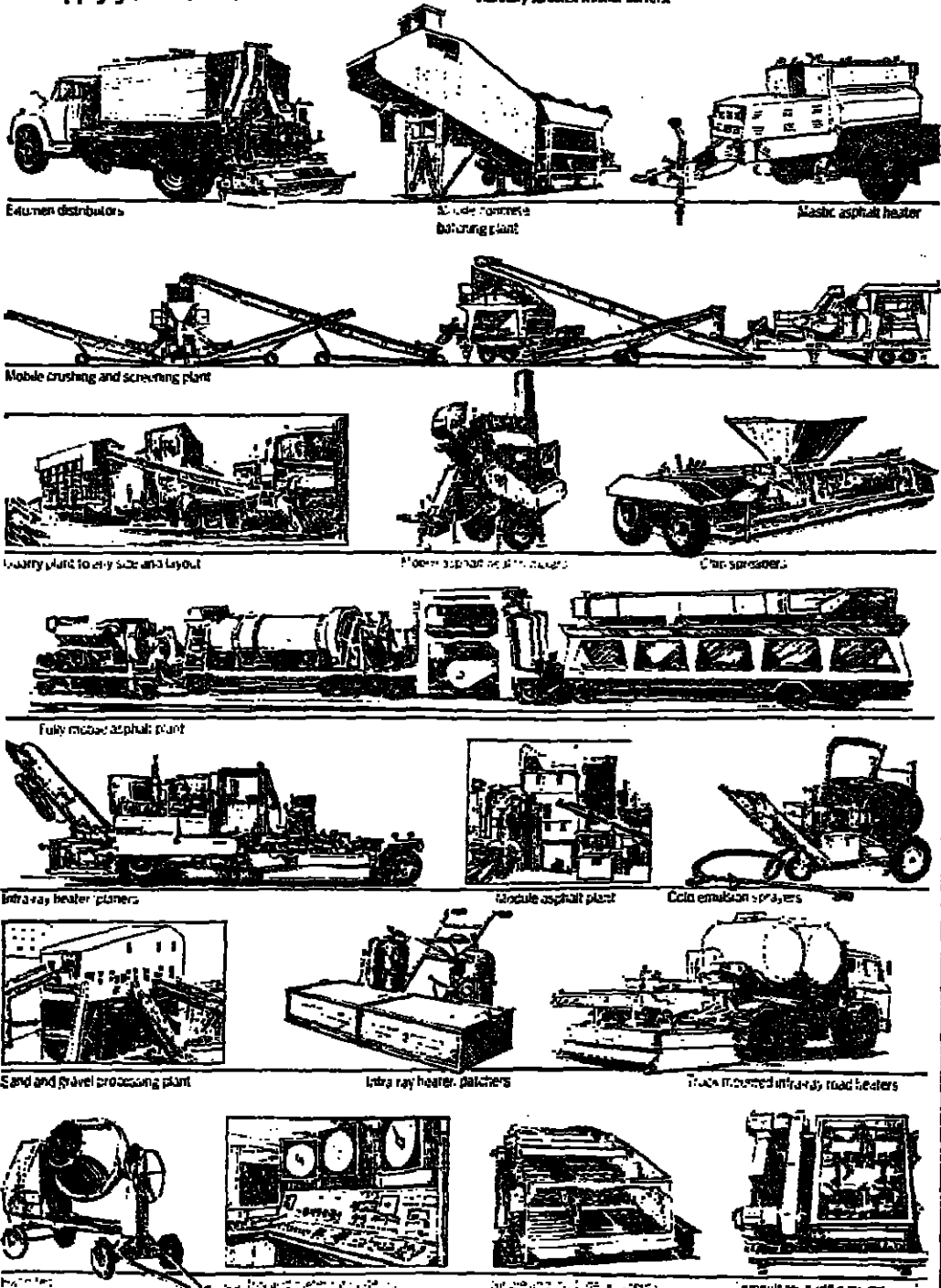
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U.K. CUSTOMERS for construction plant and equipment are having a tough time at home, with the recession in building and civil engineering dragging on into its fifth year and with little real sign of any significant improvement on the horizon.

In the past two years no fewer than 5,000 building companies have gone out of business, many others have undergone severe rationalisation and nearly all have suffered in some way from a domestic downturn in demand which has cut ordering levels by 25 per cent. since the last peak in 1973.

At the very best of times the average construction company is hard pressed to meet anything other than a minimal capital investment programme and it is hardly surprising that for many the question of plant renewal has been at least temporarily shelved. The situation has naturally been less serious for the larger builders and civil engineers, many of whom have maintained work levels by increasing overseas activities, but even here there have been signs of plant investment cycles being stretched out over longer than normal periods.

If the construction sector was anticipating a major boost from last week's mini-budget, it must have been sorely disappointed and there is a widespread hope that next time round the Government will provide the industry with a stimulus sufficiently large enough to reverse the sector's declining workload.

Mr. Healey did announce that some £400m. would be injected back into the industry in the next financial year, but in view of earlier proposals to reduce public expenditure on construction during the same period, the effect of the latest decision will broadly be to restore the status quo.

The industry is anxiously re-emphasising the point that in 1976 Mr. Healey chose to reduce the public sector construction budget by no less than £1.4bn. and that despite some minor packages of aid announced during 1977 he still has a long way to go to make amends for his actions.

In addition, the help he did announce seems unlikely to help the "heavy" end of the industry where expenditure on plant and equipment is higher. Although no details have yet been made available it seems likely that most of the money will go into housing improvement and renovation work, an area where increased output can make a fairly major impact on unemployment. The civil engineers were

quick to complain that their sector of the industry is still in serious difficulties in home market terms and that they alone would need £300m. in new business merely to restore their output levels to those which pertained during 1974.

All sectors of the industry are annoyed that the new money to be allotted for construction projects will not even be made available until the start of the next financial year, still five months away.

One significant voice in support of the Chancellor's strategy, however, came from the National Federation of Builders and Plumbers Merchants, which warned that the building industry's capabilities had been severely damaged by excessive upswings and downturns in workload and that this time a policy of moderate and progressive rises in public spending should be followed. The Federation said it believed that a gradual increase in moderate checks, if required, would better ensure steady capital investment in modern plant and equipment and the retention of a more stable and skilled workforce.

The Federation's views were not, however, universally shared and the National Federation of Building Trades Employers described the £400m. as "the least the industry had hoped for."

There are an estimated 250,000 construction industry workers out of jobs—the figure is higher if employees in associated industries and professions are taken into account—and there is a great deal of scepticism concerning the Chancellor's projection that his plans would provide an additional 30,000 jobs.

It is being pointed out that because many contractors have been keeping on people—for whom there is little work—in the hope that an upturn is on the way, there is considerable underutilisation and that not until this slack is taken up will new jobs begin to be created.

Over and above the latest budget proposals, therefore, the outlook for the industry remains fairly bleak. The value of total new output for the current year is expected to fall by around 5 per cent.—an improvement on earlier forecasts of 8 per cent. or more—but the decline seems certain to continue next year even without any Government-formulated restrictions.

The last Little Nerdly report on the construction sector suggested that new output next year would show a decline of a further 4 per cent. in 1978. The picture painted in the same report of output patterns since

the last boom makes sombre reading, with the industry's workload falling by 8 per cent. in 1974, by 6 per cent. in 1975, and by 4 per cent. last year.

The salvation for many contractors—as well as their plant and equipment suppliers—has been the availability of work overseas. The plant and equipment manufacturers' fortunes must largely have been sustained because of their customers' commitments to large capital-intensive projects abroad and their readiness to ship plant from the U.K. for use on site, often because the developing countries are not in a position to supply the hardware themselves.

It is certain that without the overseas projects suppliers of equipment for use in sectors like road building and earthmoving would have fallen on much harder times in terms of sales to their domestic customers.

The tendency to raise overseas work as a percentage of total work is likely to be maintained by the U.K. construction sector in the longer term. All the projections suggest that to sustain the same levels of major civil engineering activity which have survived since the last war.

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A major break in industry's lifeline

BY NICK GARNETT and LYNTON McLAIN

BRITISH Oxygen Company (BOC) dispute blew up weeks ago amid intense public interest. Since the first major strike, a wage offer ostensibly at the limits set by the Government's 10 per cent. limit has crippled large sections of industry, opened up the spectre of total shutdowns in building and led to tens of thousands of lay-offs throughout the country.

The roots of the strike of many workers in BOC's Division lie in their unwillingness to accept single wage rises, suspicion of company work, and resentment, which have varying degrees of justification, or not, at the company's hands.

The negotiations have been little short of a series of BOC's customers, management, and workers throughout the country will be watching developments at a national shop-stewards' meeting, scheduled for to-day to discuss company proposals to end the dispute.

Companies in Britain's engineering, metal fabrication, building, ship-repairing, glass, textiles, food and light bulb industries rely to a greater or lesser extent on industrial gases.

The cost to industry is £60 a day, according to industrial gas users in the gas supplies in three cylinders, in bulk as gas for vaporisation on premises, or by pipeline from large plants, usually built to specific large plants—

90 per cent. of pipeline gases are bought by the steel industry and most of the rest by the chemical industry.

Oxram-GEC, one of the first major companies to shut completely as a result of the strike—its has sent home 3,000 men—was using 200 tanker loads of liquid gas a week before the strike. Demand for light bulbs fluctuates and it has not been able to justify piped industrial gas supplies: in any case, it is doubtful that BOC would even consider the idea on the grounds that there was insufficient demand elsewhere in the Wembley area where the company has its factory.

In the context of the present strike, the method of delivery is important, as it is only hourly-paid cylinder handlers and drivers who are in dispute. This cripples all but the biggest users. It is significant that the British Steel Corporation has not announced any lay-offs, with gas supplies continuing down pipelines from BOC's tonnage works. Only at British Steel's Corby works, where some BOC employees on the tonnage oxygen plant are hourly paid manual workers, has there been any major upset of steel production.

With the basic oxygen steelmaking plant shut down, the works has lost 90 per cent. of its steelmaking capacity.

Liquid nitrogen

Aside from the steel industry which, while it uses by far the bulk of oxygen, now has a slow growth in demand for the gas, other industries are recording record increases in industrial gas consumption. The biggest growth is for liquid nitrogen, which is delivered by road or rail tanker. BOC is experiencing a 20 per cent. annual growth in liquid nitrogen sales to the food, metal heat treatment,

rubber and plastics industries, all of which are becoming ever more dependent on the gas.

Bulk deliveries of oxygen are growing at 10 per cent. a year with metal melting furnaces, glass, sewage and chemicals the main growth sectors.

The mechanical and electrical engineering sector accounts for 60 per cent. of bulk liquid oxygen consumption, with deliveries by both road and rail tanker, as well as 38 per cent. of bulk nitrogen consumption. Britain's continuous process industries such as oil refineries use 20 per cent. of the bulk oxygen and 40 per cent. of bulk nitrogen, while the food industry uses 30 per cent. of bulk liquid nitrogen.

The remaining 20 per cent. of industrial bulk oxygen is re-distributed as a compressed gas in cylinders, and with acetylene accounts for the major part of cylinder gas sales in Britain. These cylinder gases are used for metal welding, cutting and process heating. Cylinders of the rare gas argon and its mixtures are used in electric welding processes for shielding the high temperature arc.

With 80 per cent. of cylinder gas sales in Britain and around 60 per cent. of all bulk liquid gas sales, BOC dominates the industrial gas market. Before the Monopolies Commission report on the supply of certain industrial and medical gases, published in December 1956, BOC had the entire market to itself.

It was only after the establishment in Britain of Air Products, with its long-standing U.S. experience of air separation plants producing hundreds of tonnes of liquid oxygen and nitrogen each day, that BOC adopted a more aggressive U.K. marketing approach with its industrial gases.

Industry benefited from the introduction of competition into the home market. There was more innovation, particularly in Air Products in the field of oxygen enrichment of iron foundry cupolas and in other novel applications for gases.

But as 30,000 companies now affected by the strike have found to their cost, the existence of Air Products on the British industrial gas market has not helped in times of crisis at BOC. Air Products' drivers are only willing to help BOC customers stranded without gas where health or safety is at risk.

Since there is no major alternative to Air Products as a source of bulk and cylinder industrial gas supplies and since even these gases are not now available to the majority of users, the strike is proving to be extraordinarily damaging to industry.

Some shipyards and factories

have tried to obtain supplies from overseas. Often these have been blacked by workers sympathetic to the strikers, even though this may mean the loss of work. Now it looks as if workers in some of Air Products' customers are beginning to sympathise with the strikers. This could make matters even worse.

The issues which lie behind the crisis are far from simple. The deal offered to the men before the strike started involved wage rises which would be at the limit provided for under the Government's pay ceiling, together with a productivity agreement. According to management the new productivity arrangement would guarantee another 5.2 per cent. and possibly up to 8.5 per cent. The unions say the company had made it clear that that would be the last offer although management complains that talks were

still proceeding when the men walked out.

One initial problem for officials of the Transport and General Workers' Union and the General and Municipal Workers' Union was that their figures did not agree with those of the

force, the offer seemed to open up the prospect of job cuts, that reduction in working hours which would hit overtime and of what productivity deals really weakened because the self- and Arbitration Service last week—with the company and union officials talking to ACAS officials separately—produced assurances from BOC on hours and manning which went a long way to allaying some of the fears of the unofficial strikers. Officials of both unions were quietly optimistic that the men might be enticed to go back to work and allow negotiations to resume.

The ACAS talks, however, exposed the real bedrock on which the strike has been built. The claim is for rises of about 30 per cent. and was at first pursued with vigour partly because of the support given to free collective bargaining by the annual conference of the Transport and General, whose members predominate among the manual labour force in BOC's English depots.

The claim was only a bargaining position but in this case it reflected an obstinate reluctance to accept rises anywhere near single figures. The problem was exacerbated, at least from the company's point of view, because a large part of the workforce is not keen on productivity deals which could boost individual pay rises above the 10 per cent. threshold.

Part of the difficulty stems from the company's current 1989 agreement which provided for a productivity bonus payments. A series of bonus payments were made during the following years on the basis of a sizeable reduction in manpower. Shop stewards say that further bonus payments based on that agreement were blocked

by pay policy and although the company is not blamed for that, it has made the workers wary of what productivity deals really provide during periods of unofficial wage control.

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Oxy-acetylene welding accounts for the largest part of cylinder gas sales in Britain.

Sanctions

The result is that workers at many depots are holding out for big across-the-board rises which, as the company is well aware, would make BOC vulnerable to Government sanctions.

Shop stewards, and some union officials believe the company has negotiated rather clumsily and has not shown itself to be sympathetic to the pay claim as it could have been, given its profitability. The company says it has negotiated constructively and has shown its willingness to go a long way towards the workers' claim by devising a well-thought-out and generous productivity deal.

It seems almost certain that an agreement on a productivity scheme is the only way out of the dispute. Industry will further bonus payments based on that agreement were blocked when that happens.

Reason for joining

Mr. H. Smith
In your issue of October 23rd, the Prime Minister in his speech to the House of Commons, said that the Government would like to see the companies in the country to be able to apply similar tests to their own activities in the field of scale mergers.

It is a little doubtful that it will be in its own interest to do so. The Government has a duty to ensure that the companies in the country are able to apply similar tests to their own activities in the field of scale mergers.

Letters to the Editor

These are the kinds of questions to which answers ought to be provided for all universities before the bottom decile is selected for discriminatory investigation. Presenting just one variable from a multivariate complex is facile and not productive. What is "productive" activity, anyway?

Barbara Harris,
Colegate, Norwich.

Monetary union

From the Director, The European Movement
Sir—Mr. Oliver Smedley (October 27) expresses his horror at the news that Mr. Roy Jenkins proposes the creation of a European monetary union. His objections seem to be confined to the implied transfer of political control over money supply to the European Commission and not to a democratically elected European Parliament with legislative powers.

Belongs to the European Parliament etc. however, to take place in 1978. Most of the European political party groups intending to contest the elections have already declared their intention to press for economic and monetary union with the elected Parliament exercising control over the European Commission and sharing legislative responsibilities with the Council of Ministers.

The will to work

From Mr. F. Steiner
Sir—Unemployment is a grave problem and by common consent, unemployment of school-leavers is among its most harmful forms.

I was told only the other day that a well-known laundry group is finding it difficult to replace a branch manager who recently retired. The shop is being temporarily run by one of the supervisors who explained to me that the reliable women, available for work and looking for it, were in the generation around retirement age. The younger women, and particularly those with children, cannot easily fit in with the limits, and inevitably want to come to work on their own terms. And the really young ones don't want the work.

Action and reaction

From Mr. E. Broad
Sir—Mr. Healey and the unions seem quite pleased to say that reducing taxation on businesses, etc. will help to reduce unemployment.

If this is correct would not Mr. Healey's original imposition of these heavy taxes have created the unemployment the unions and the whole nation is complaining about?

Site value tax

From Mr. M. Townsend
Sir—It surprises me that Mr. Slater can argue in your correspondence column (October 23) that a tax on site values would be "a great advance on our present penalising and confiscatory tax structure" without realising the confiscatory nature of the site-value tax itself.

Landowners of to-day have purchased their property and investment in real estate involves the same risks and returns as investments in any other assets: the demise of the many property developers after the 1973 boom demonstrates only too clearly that land speculation is not simply a profit making spree. To tax site values would not only penalise but also discriminate unfairly against one class of investor. It is tantamount to confiscation of property acquired for investment.

Rose coloured spectacles

From Mrs. L. Turner
Sir—With reference to Dr. D. Carrick's article "Women: a highly personal view" (October 24), I would like to take up his references to "the more stable male."

I have noticed that male chauvinists talk of all women in the most general terms (referring to menstruation as though it was unnatural, despite the fact that it affects half the population) but will not give the same treatment to their male counterparts. In fact when they talk of "men" they usually have themselves and their friends in mind, expounding their virtues and looking at themselves through rose coloured glasses.

Paltry award to pensioners

From Mr. S. Tresadern
Sir—While obviously welcome, the £10 Christmas bonus for pensioners announced by Mr. Healey smacks of meanness.

£10 bonus was first paid in December, 1972, and by the time the 1977 payment is made we will have suffered inflation of some 114 per cent. This means that the 1977 payment at 1972 prices is worth £4.85.

To revalue the bonus to to-day's price level would require a payment of £21.40, which would cost the Exchequer £14m. Financing this could have been achieved by raising personal tax allowances for 1977-78 by about £15 or so less than has actually been announced—a cost to basic-rate taxpayers of about 10p per week each.

Management of direct labour

From the Head of Research, Aims for Freedom and Enterprise
Sir—Your report (October 26) Mr. Guy Barnett, for the Department of the Environment, as saying that the Government considers local authority building departments (or agencies) have an important role to play in bringing new life to decaying urban areas. One might just be tempted to bemoan this, even in a country needing desperately to raise productivity and make the best use of its resources, if there was anything to substantiate that "the more stable male" is the best among them—produce work cheaper, faster and to higher standards than private contractors' (Labour's background paper, "Building Britain's Future", p. 33).

In fact, Mr. Freeson, the Housing and Construction Minister, and the public treasurers' organisation, the Chartered Institute of Public Finance and Accountancy, have now openly admitted that there is no way of judging the performance of a D.L.O. The reason is that they do not have a management and accounting system producing the necessary information.

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Industrial Architecture Award

The award goes this year to the Herman Miller Furniture Factory, Bath, Avon

THE PANEL

This is the eleventh year of the *Financial Times* Award for an outstanding work of industrial architecture. During those years some 800 entries have been received in this relatively limited area of new building.

The award is open to all, both architects and engineers, concerned with the design of industrial works which can bring to either town or country an outstanding contribution towards the encouragement of a better industrial environment.

The assessment panel comprises two architects, selected for their eminence in practice and their interest in the industrial landscape, appointed with the co-operation of the Royal Institute of British Architects, together with one lay assessor.

This year the architect assessors were Sir Philip Powell and Mr. William Whitfield CBE. The lay assessor was Sir Charles Troughton, Chairman of the British Council.

Information concerning the 1978 award will be announced in the Spring.

Report of the Assessors

It is the unanimous decision of the assessors that the Herman Miller factory in Bath should be the winner of this year's award. It is, say the assessors, a fine example of the relationship of brilliant architectural skill, industrial engineering ability and management imagination. It is well sited, beautifully and precisely detailed and with well thought out and sensitive treatment of the surrounding areas, particularly the landscaped space between the building and the river. Internal planning is directed towards possible future needs and is entirely flexible, even the lavatories are planned as self-contained cabins which can be plugged in to any one of sixteen positions. This is a building which makes good use of this pleasant, yet industrial, reach of the river.

The Truman Brewery exhibits a very successful merging of new, old and reconstructed work which will add to the London scene for generations. The main, cascading mirrored glass facade forms one side of a new and handsomely paved square off Brick Lane and reflects, in slightly distorted form the very pleasant surrounding buildings. The interior is beautifully detailed and very attractive; altogether a fine building both inside and out, of great, indeed romantic, charm in a happy relationship with the old buildings with which it is physically and visually closely linked.

The Sewage Treatment Works at Milton Keynes comprises a large group of separate buildings, the tall Incinerator House being the largest, providing a general impression of handsome, well detailed and sometimes dramatic, industrial buildings sitting, however, on a windswept treeless site. Although fairly new it is disappointing to have to say that the buildings are already beginning to look uncared for.

The Emgas Service Centres at Leicester although working well, and apparently much liked by the users, suffered from disappointing external works (except the internal garden) but the main building containing offices and canteen comprises an elegant and well detailed steel and glass structure.

Excel House Distribution Centre at Reading is a new warehouse and an ingenious and largely successful refacing of an existing warehouse building on the river front, with pleasantly designed external works including the perforated concrete block car-parking areas.

Outside both warehouses are quite handsome, windowless buildings with plastic coated vertically corrugated steel sheeting in dark green. This is a speculative job, not yet let and therefore looking rather desolate inside. The buildings make good use of the river front, but are generally less successful than the stylistically similar workshop in Bath, by the same firm of architects.

The New Main Boiler House, Oldham and District General Hospital, is a simple rectangular box with a modest, straightforward grey painted steel chimney, standing on a grim site. Due to be redeveloped and where demolition has already started. One long side (east facing) of glass in metal frames generally painted black but the horizontal band of opening lights painted red - a successful touch! is a shop window to the boilers - quite elegant and well designed but marred by a blank panel of brickwork which looks as if a shutter has been blocked up; the other three sides are of brick, harmless but undistinguished - the brick a rather insipid pink.

The interior presents a neat looking job with good finishes; quarry tiled floor, metal decking ceiling, exposed steel frame and cream brick infilling panels for solid walls.

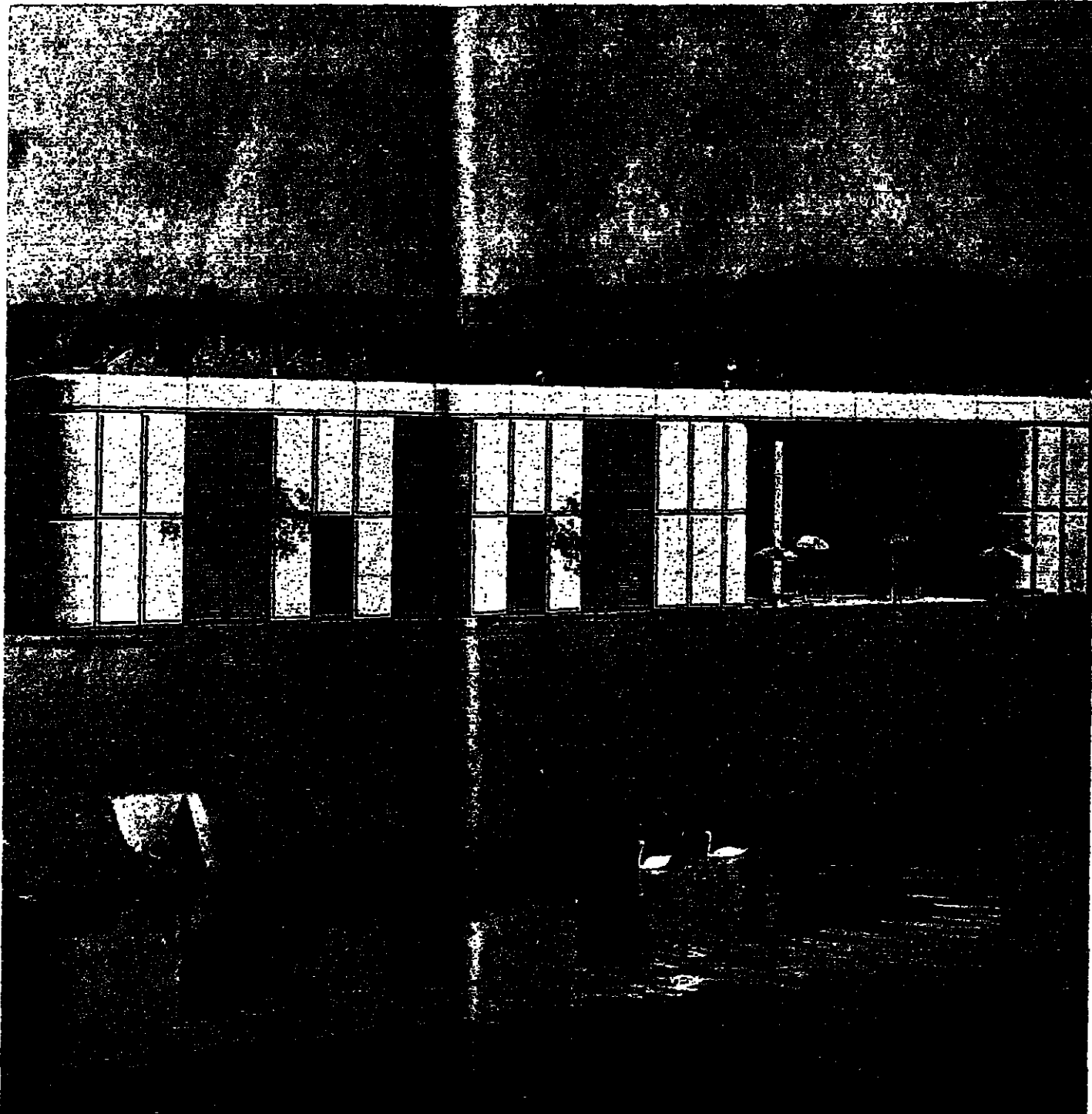
THE WINNER

New Furniture Factory for Herman Miller Ltd., Bath

An industrial building which is capable of responding to the wide variety of demands by the client and also breaks new ground by providing better amenities and greater involvement for the work people.

The building is situated on the River Avon at Bath but although it is in an Industrial Area, considerable importance was attached to the way in which the building fitted into its surroundings. The fibreglass panels are cream coloured to harmonise with the Bath Stone which is the predominant material in the City - the whole site has been tarfed and nine mature willow trees have been planted along the river bank. Fixed external tables and seating have been provided for sixty work people on the south side of the building where two courtyards open on to the river frontage.

DESIGNERS: Farrell/Grimshaw Partnership
QUANTITY SURVEYORS: Hanscomb Partnership
STRUCTURAL ENGINEERS: Peter Brett Associates
SERVICE ENGINEERS: Ron Hurst Associates
BUILDER: Wiltshiers



New Furniture Factory for Herman Miller Ltd., Bath



New Main Boilerhouse, Oldham and District General Hospital,

COMMENDED

Truman Limited, The Brewery, London E.1.

In 1972 Arup Associates were commissioned to design a building to accommodate new amenities, storage, offices, truck docks, tanker bays and engineering workshops within the brewery complex in Spitalfields, London.

The site, included two listed Georgian houses that have been retained and renovated to form an integral part of the development and enclose a new courtyard, with the listed frontage of the old stable buildings.

The brief led to a design solution in which the buildings and organisation closely relate to its historical surroundings, with industrial and amenity spaces grouped on the lower three floors with a brick podium. The three offices above are planned behind a mirror glass facade so reducing energy consumption and reflecting its surroundings.

The elevations of this brick podium form an extension to one of the historic buildings following original street lines and maintaining the scale of its surroundings. The office floors are stepped back from the street and the face of the brick podium to reduce further the scale of the building.

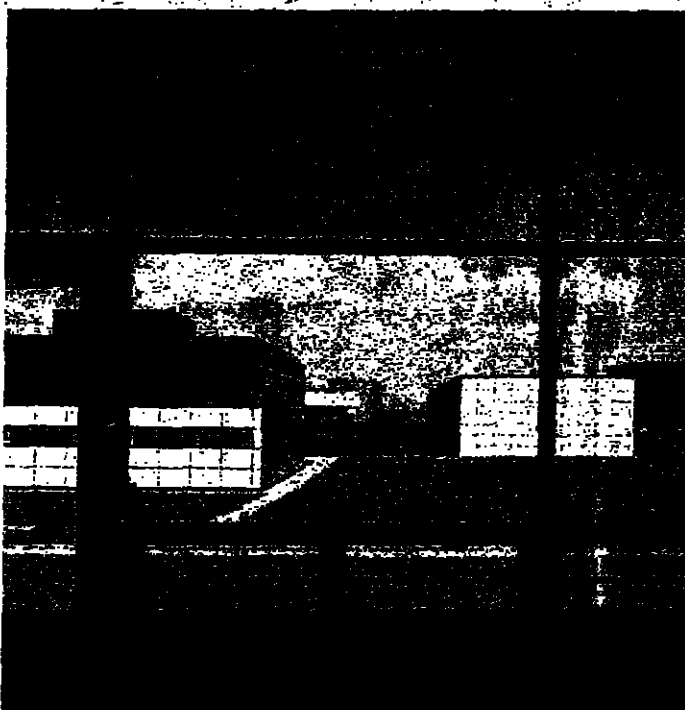
DESIGNERS: Arup Associates; Architects, Engineers & Quantity Surveyors, in association with Wakeman Trower & Partners, Quantity Surveyors
BUILDERS: Holland, Hannen & Cubitts

Excel House, Distribution Centre, Reading
McKay Securities Ltd.

Excel House comprises a large office and warehouse headquarters on an attractive river frontage.

The project was a speculative venture and therefore was not for any specific client requirement; The buildings represent the conversion of an existing group of buildings, the rear warehouse having been designed with a removable central roof area so that its use could change to offices/computer space or small scale light industry, at a later date. With the central roof area removed, a courtyard type of building would be created thus gaining daylight and aspect into the centre of the building.

DESIGNERS: Farrell/Grimshaw Partnership
QUANTITY SURVEYORS: Monk Dunstone Associates
STRUCTURAL ENGINEERS: Peter Brett Associates
BUILDERS: Caffin & Co.



Cottonvalley Sewage Treatment Works, Milton Keynes

Emgas Service Centre, Leicester

The project for the East Midlands Gas, comprises a customer service and communications centre, its function is to provide the necessary warehousing and back-up facilities in respect of installation and servicing of mains distribution and customer service for gas consumers in the Leicestershire regions. The complex includes its own vehicular maintenance, industrial and technical workshops.

One of the prime requirements in the thinking behind the proposed new Centre was the improvement of Customer Service. The location of management and operatives under one roof, planned to have good work flow and short communications between telephone bureau, work planning supervisors, operatives and stores, will lead to substantial improvement in efficiency in dealing with routine and emergency jobs.

No restrictions were placed on the development of the site by the planning authority other than the retention of a Victorian clocktower and gatehouse at the south-east corner of the entrance road and a finite landscaping scheme along the riverside.

DESIGNERS: Architects Design Group
QUANTITY SURVEYORS: Falton & Partners
STRUCTURAL CONSULTANTS: Ove Arup & Partners
MECHANICAL & ELECTRICAL CONSULTANTS: R. W. Gregory & Partners
MAIN CONTRACTOR: Shepherd Construction

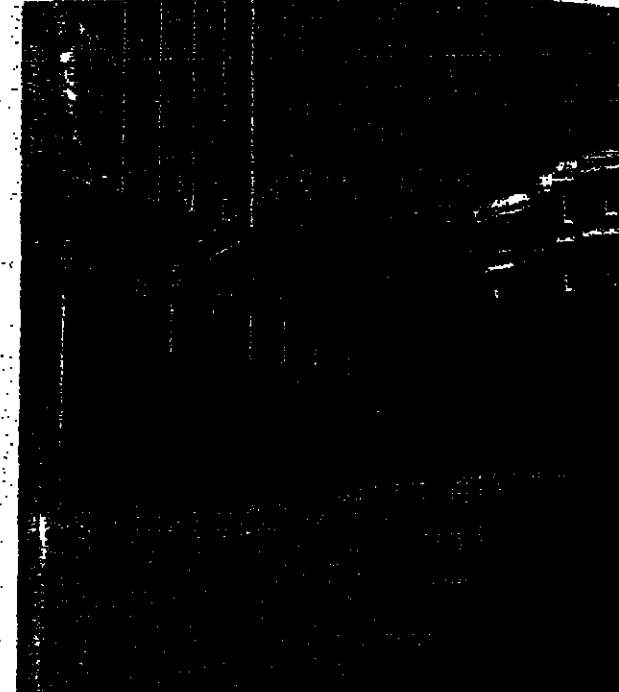
Cottonvalley Sewage Treatment Works, Milton Keynes

Anglian Water Authority, Bedford Division

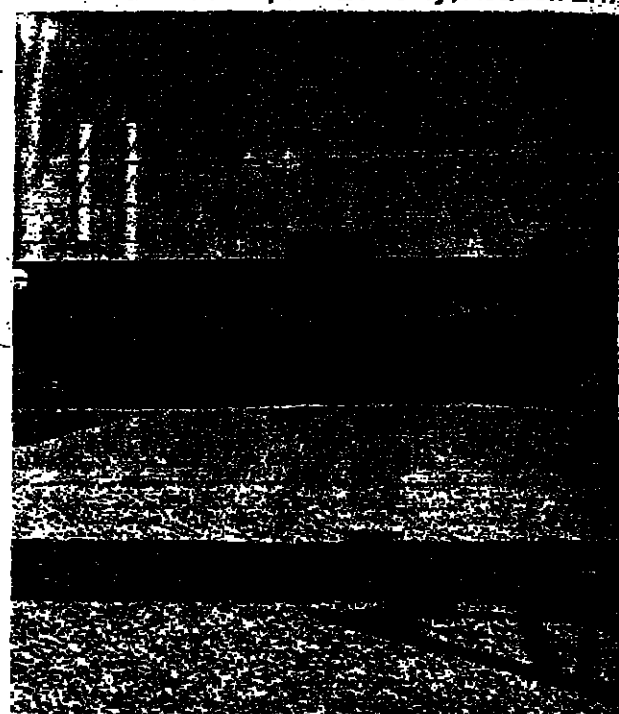
The Works is bounded by the M1 motorway, the River Ouzel, and city roads Portway and Tongwell Street. The Works plateau, is formed in gently undulating land protected by a flood bund on the north east, and eventually to be surrounded by forestry to the south and west.

The Water Authority set high standards for the effluent discharge, as the River Ouse is used for potable water abstraction downstream.

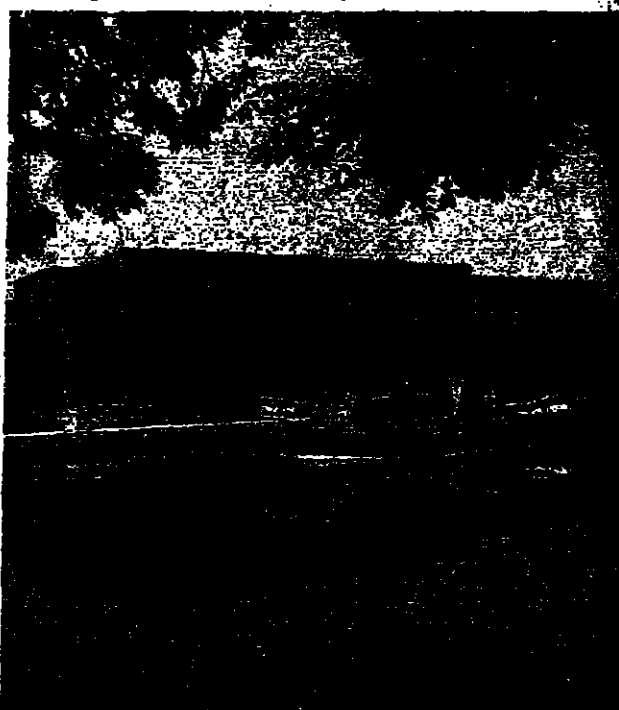
The superstructures fall into two categories - those housing plant and those providing the back-up for administration.



Truman Limited, The Brewery, London E.1.



Emgas Service Centre, Leicester



Excel House, Distribution Centre, Reading

control and amenity. A 1.500M planning module controls form of the buildings, producing a structural module of 6.000M, either square or expanded in 1.500M increments. building heights are governed by a 1.000M vertical module controlling grid is realised in materials which allow easy change and performance requirements.

DESIGNERS: Milton Keynes Development Corporation
J. D. & D. M. Watson
CONSULTING ENGINEERS: J. D. & D. M. Watson
BUILDER: Bovis Civil Engineering

New Main Boilerhouse, Oldham and District General Hospital, The North West Regional Health Authority

The existing hospital is a largely Victorian fabric which is to be replaced by new building over the next few years and has been planned to avoid interruption of service to the public and to guarantee the continuation of all plant services during rebuilding, in particular the supply of steam for space heating, medical functions, laundry service and cooking.

The site of the new boiler house was formerly covered by series of reservoirs which served a spinning mill. It is on a main road junction in an area where the mill town landscape is being replaced by a mixed urban landscape of houses, shopping centres and light industry. The very close relationship of the boiler house to the hospital complex required a building form of simple, interesting shapes and modest scale.

DESIGNERS: Taylor Young & Partners in association with Regional Architect, NWRHA
QUANTITY SURVEYORS: Frank Hyams & Partners
MECHANICAL & ELECTRICAL ENGINEERING CONSULTANTS: R. W. Gregory & Partners
STRUCTURAL ENGINEERING CONSULTANTS: Cooper and Ross
BUILDER: P. Bracegirdle

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AVANA GROUP LIMITED

INTERIM STATEMENT

Unaudited results—26 weeks ended 1st October, 1977.

	26 weeks ended 1.10.1977 £'000	27 weeks ended 1.10.1976 £'000	53 weeks ended 2.4.1977 £'000
SALES (less inter-company transactions)	13,692	10,856	23,693
GROUP PROFIT—subject to depreciation and taxation	1,036	839	2,187
GROUP PROFIT—subject to taxation	769	574	1,704
CORPORATION TAX—at 52% (52%)	400	296	577
DIVIDENDS:			
Interim	102	92	107
(5p per share)	(.45p per share)	(.45p per share)	(.45p per share)
Final			107
(52.5p per share)			(52.5p per share)
SHARE AND CAPITAL RESERVES:			
Issued Ordinary	1,023	1,023	1,023
Issued Preference	150	150	150
Capital Reserves	2,531	2,531	2,531
Revenue Reserves	1,932	1,169	1,865
	5,636	4,873	5,369

The Group's performance continues to improve and reflects the benefits from past years' expenditure on plant modernisation and product development.

The policy of giving good value for money has provided the strong basis for the improving level of both sales volume and of profitability. This policy is being pursued by continual updating of plant and production methods and new product developments. There is considerable profit potential still to be obtained from past capital investment and the full benefits will be enjoyed over the coming months.

The net profit increase of £195,000 has been obtained from sales which have increased by 26% with a significant part of the increase coming from higher volume sales in spite of a not very favourable summer.

These results have borne the cost of the industrial action by the Bakers' Union which recently affected both the Cardiff and Rogerstone bakeries. We were embroiled in a dispute of which we had no part and whose outcome we could not influence. The lesson to be learned from this incident seems to be that even those companies, such as ours, with an unblemished record of good industrial relations, need to improve constantly the level of communications with their staff.

The period of stability we have enjoyed in the value of sterling has been an advantage in controlling raw material costs but we have had to meet higher prices in several areas—notably coffee, cocoa, fruit and meat. There have also been increases brought about by the E.E.C.'s agricultural policy which are especially hard to accept in the context of the world supply situation.

Our overseas efforts are making good progress, and exports are building up in a most encouraging manner.

It is the Board's intention to continue the present well proved policies whilst seeking actively other areas which are complementary to existing interests and which would provide bases for expansion which would not dilute the present level of earnings.

The Board proposes to pay an interim ordinary dividend of 5p per share on 3rd January, 1978 to all shareholders on the register on 28th November, 1977. The share registers will be closed from 28th November, 1977 to 5th December, 1977.

Avana Buildings, Fendryis Street, Cardiff. By order of the Board, T. H. J. BARRETT, Secretary. 31st October, 1977.

APPOINTMENTS

Board re-organised at International Stores

Mr. Leslie Green, previously joint managing director, has been made deputy chairman of INTERNATIONAL STORES. Mr. Michael Groves, marketing director since 1975, becomes joint managing director with overall responsibility for buying, marketing and retailing. Mr. Gordon Latham, who joined International in 1974, continues as joint managing director, retaining overall responsibility for finance, personnel, services and property, and architects. Mr. Harold Deakin, trading director, becomes services director with wide responsibilities including architects, distribution, management services and administrative services. Mr. Alex Thomson, buying controller, joins the Board as buying director. Three directors retain their present responsibilities. Mr. Robert Blair, retailing; Mr. Norman Mills, personnel; and Mr. Richard Harn, property.

Mr. John Abbott has been appointed managing director of AIRFIX PRODUCTS in succession to Mr. John Gray, who has relinquished that post to concentrate on his activities as chief executive of the toy division. Mr. Abbott joins Airfix from International Sports Company, part of the Dunlop Group, where he was marketing director and general manager of five operating companies, including Slazengers.

Mr. Charles Burkin, at present assistant general manager (international), Midland Bank, has been appointed chief executive of UBAF from December 1. He succeeds Mr. Walter Cronk, who has retired. UBAF is a London consortium bank established in 1972 by Union de Banques Arabes et Francaises.

Libyan Arab Foreign Bank and Midland Bank. Howard Machinery has announced the appointment of Mr. A. McL. Morrison as chairman of HOWARD HARVESTORE, their subsidiary company jointly held with A. O. Smith Corporation of the U.S.

Mr. Herbert Clarke has retired as a director of RIRIHD QUALCAST and as chairman of the heating division after 48 years with the group. Mr. Clarke becomes services director with wide responsibilities including architects, distribution, management services and administrative services. Mr. Alex Thomson, buying controller, joins the Board as buying director. Three directors retain their present responsibilities.

Mr. Douglas Gray, who has been appointed director of CHROMWORKS has been works manager since 1976.

Mr. F. J. Hatcher has been appointed financial director of ATCOST (MIDLANDS). He has been general manager for the past 10 years.

THE MERSEY DOCKS AND HARBOUR COMPANY has appointed Mr. Ken Gorrie as manager with special duties in the operations division, reporting directly to the operations director, Sir Peter Austin. Mr. Gorrie, who has been general cargo manager of the company for the last two years, has been a stevedoring specialist on the river for 29 years.

Sir Peter Matthews has been appointed a non-executive director of PEGLER-PLATESLEY. Sir Peter is managing director of Vickers and holds a number of directorships which include Lloyds Bank and British Electric Traction. He is a vice-president

of the Engineering Employers Federation. Mr. J. L. King has been appointed to the Board of the NINETEEN TWENTY-EIGHT INVESTMENT TRUST.

Mr. F. S. Axford, chairman and managing director of North Cornwall Tractors has become president of the British Agricultural and Garden Machinery Association.

Mr. R. Blackburn has been appointed to the Board of SOMIL.

Mr. Roger H. Bulster, managing director of Alton and Company (Whessoe Group) has been elected chairman of the British National Committee of the WORLD ENERGY CONFERENCE, succeeding Sir John Hill, chairman of the United Kingdom Atomic Energy Authority.

Mr. M. C. Whitley has been appointed financial director of REDFEARN NATIONAL GLASS in addition to his position as company secretary.

Mr. Don Clarke has become financial director of HERMCREST.

Mr. W. A. Simpson has been appointed managing director of GEORGE WIMPEY M E and C following the death of Mr. John Anderson. Mr. Simpson joined the company in 1952 and has been a director since 1969. He is also a member of the Board of Management of George Wimpey and Company.

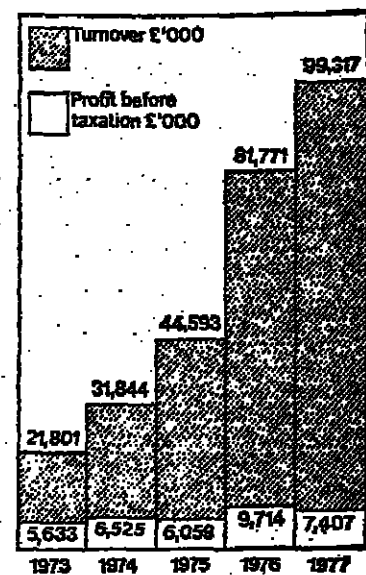
Sheikh Najib Alamuiddin has, for family reasons, resigned the chairmanship of MIDDLE EAST AIRLINES and also from the

NATIONWIDE GROWTH CONTINUES

Financial Highlights for year ended 30th June 1977

	1977	1976
Turnover	£700	£700
Profit before taxation	99,312	81,771
Profit after taxation	7,407	9,714
Earnings per share	24.9p	31.4p
Dividend cover	3.4	4.9

- The group built and sold 8,253 houses, being 21% more than in the previous year in spite of the economic blizzard which has devastated the housebuilding industry generally.
- Other sectors also made good progress with £4m added to the rent roll of our investment portfolio and contracting activities expanded satisfactorily.
- Liquidity continues to be strong with over £13m of unused facilities with major clearing banks.
- A final dividend of 4.9p is proposed making a total of 7.3p for the year, being the maximum allowed under present legislation.
- Confidence in the future is supported by a three year land bank and a strong forward order book in all sectors.



Barratt Developments Limited

Copies of the Report and Accounts may be obtained from The Secretary, Wingrove House, Postland Road, Newcastle upon Tyne NE5 8DP.

finishing executive of TI Weldless. Mr. C. J. Martin has become U.K. sales executive of TI Desford Tubes. Both concerns are members of the Tube Investments Group.

Mr. Jeffrey Bernhard, managing director of the Bernhard Group, has been appointed president of the HORTICULTURAL TRADES ASSOCIATION.

Mr. R. Douglas has been appointed continuous mill cold-

director-general of the Institute of Directors, has joined the Board of the F. ENGLISH GROUP. Sir Richard is also a director of Bovis Pierson, Holding and Pierce (U.K.), and other companies.

Mr. Ken Thomas has been appointed a full Board director of GILTSBUR BULLENS TRANS-PORT SERVICES and continues as regional director for the North of England and the Midlands.

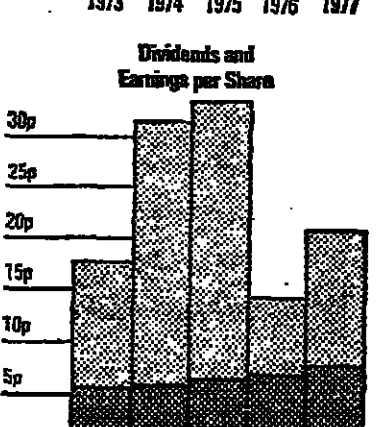
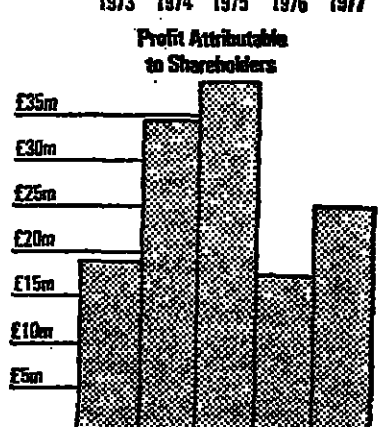
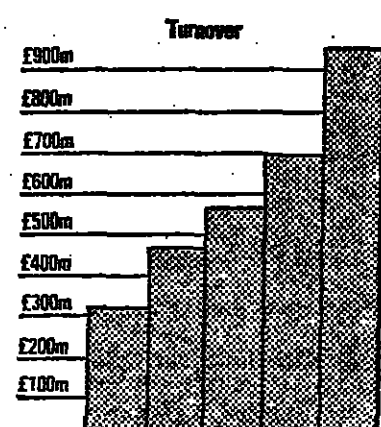
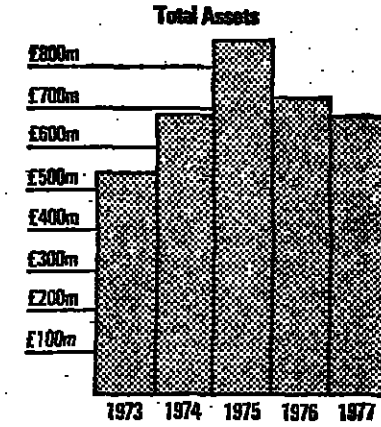
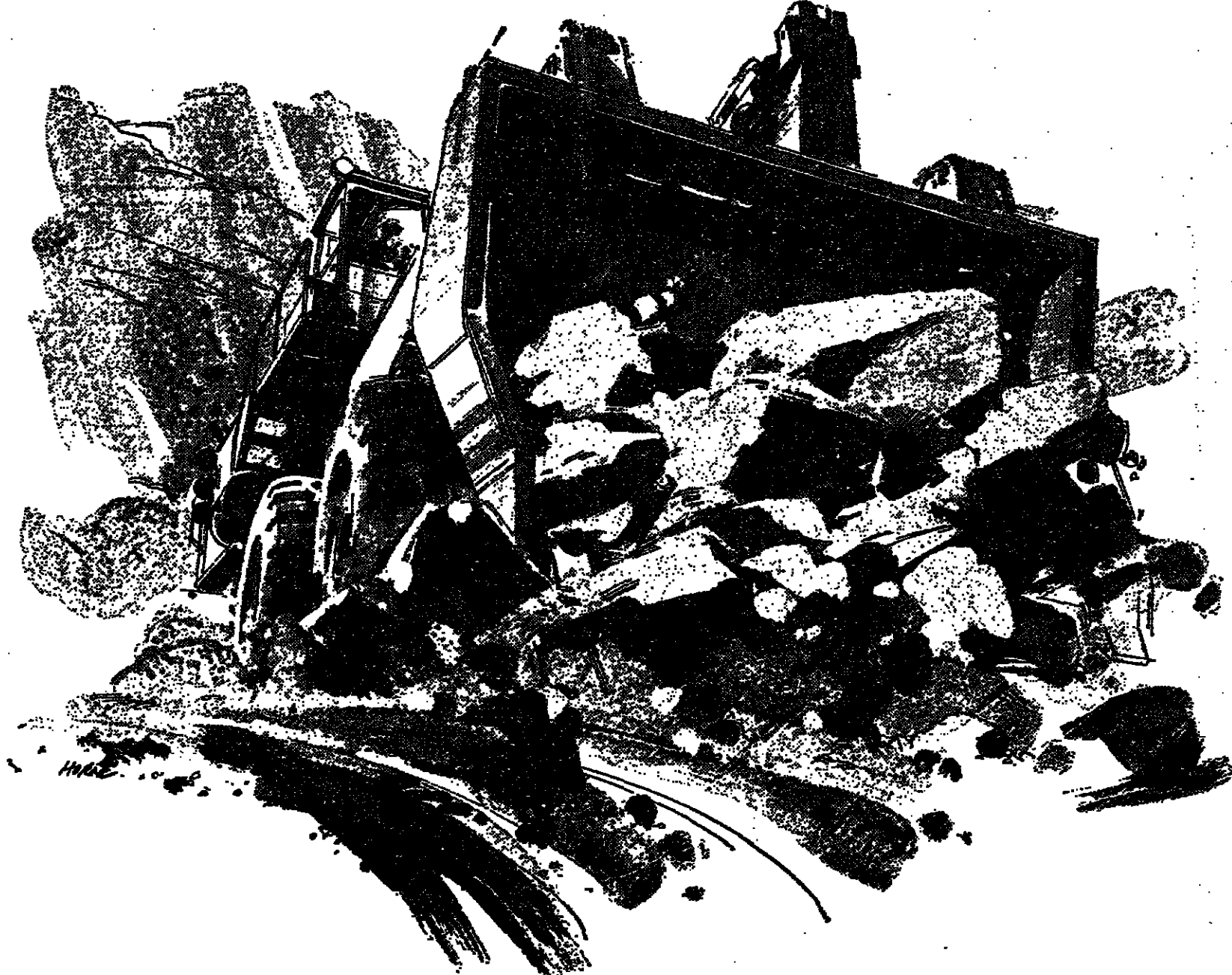
Dr. A. N. Ferrar has been appointed chief technical adviser of TRANSPARENT PAPER

Mr. Trevor Bedford has been appointed a director and general manager of the HONGKONG LAND COMPANY.

Mr. R. Douglas has been appointed continuous mill cold-

Dr. A. N. Ferrar has been appointed chief technical adviser of TRANSPARENT PAPER

Gold Fields: one of Britain's natural resources.



World industries and national economies depend on the efficient development of natural resources: metals, minerals and energy products.

This is the area in which Consolidated Gold Fields—a British company—specialises all over the world.

Company activities embrace steel production and distribution, construction materials, mobile plant, shipping, transport, engineering, manufacturing, trading, financial services and exploration. Its mining interests include gold, silver, coal, tin, iron ore, uranium, ilmenite, rutile, zircon, copper, zinc and vanadium.

As well as operating in the United Kingdom, Gold Fields has interests in Europe, North America, Africa, Australia, the Middle East and the Pacific.

Group companies are committed to a long term development programme to help meet future demands for natural resources essential to industry. By continuing to invest at home as well as overseas, Gold Fields is contributing to the British economy by providing employment and helping the balance of payments.

Salient features of the 1977 Accounts

	1977	1976
Profit before taxation and exceptional items	£57.2 million	£47.7 million
Taxation	16.1	20.3
Net profit attributable to the members of Consolidated Gold Fields Limited	25.0	17.6
Per Ordinary Share	20.84p	14.62p
Ordinary Dividend		
Cost to the Company	9.9	8.9
Per Share payable	8.2317p	7.37p
Gross equivalent including related tax credit	12.4723p	11.3385p
Total Assets	683	734

Certain figures for 1976 have been restated to reflect current accounting policies.

The Secretary, Consolidated Gold Fields Limited, 49 Moorgate, London EC2R 6BQ.

Please send me a copy of the 1977 Annual Report.

Name _____

Address _____

Italian International Bank

BASE RATE

Italian International Bank announce that, with effect from close of business on October 31st the base rate for lending will be reduced to 6%.

Italian International Bank Ltd.
P & O Building, Leadenhall Street, London EC3V 4PT
Tel: 01-623 8700 Telex 885370 (General)

SECOND CITY 50% INCREASE IN DIVIDEND.

Chairman Geoffrey L. Joberns reports that despite a difficult year for the building and construction industry in general, Second City maintains turnover at £14 million.

Operating profit before taxation was £902,559.

The paid dividend increased by 50% to £208,723 equivalent to 1.726p per share.

Reserves increased by £1m to a record of £4,969,854.

SECOND CITY Properties Limited

Copies of the Report and Accounts can be obtained from the Secretary at Oxford Street, Bilston, West Midlands.

DOLLAR LAND REPORTS PROGRESS

Judgment has been given in New York in relation to the contract for the sale of the Group's three U.S. properties. Completion of the sale has been ordered for 1st November 1977. The purchase price is to be \$27,515,033. Of this some \$4.2m. comes to the vendor companies. The remainder is represented by the assumption of the mortgages by the buyer. The \$4.2m. is subject to pre- and post-completion adjustments and will be received largely in the form of a five-year purchase-money mortgage.

The English company and the Canadian subsidiary are seeking compensation from the shareholders who sought to have the contract declared invalid.

The Group retains the Montreal property which produces net revenue of Can.\$235,000 per annum.

In his circular to Shareholders dated 28th October 1977 the Chairman stated:—

"It is fair to say that what has occurred in the last year represents a significant advance in the search for a solution of the troubles of the Group. It would be quite wrong, however, to claim that the present situation represents more than a stage from which further progress must be sought."

Gold Fields

This advertisement is issued in compliance with the requirements of the Council of The Stock Exchange. It is not an invitation to subscribe for or purchase any securities.

ASSAM FRONTIER TEA HOLDINGS LIMITED

(The Company)
Incorporated under the Companies Acts 1948 to 1967

SHARE CAPITAL		Issued or to be issued or credited as fully paid
Authorised		£
235,000	Preferred Stock (transferable in units of £1 each)	235,000
940,000	Ordinary Stock (transferable in units of £1 each)	940,000
1,175,000		1,175,000

All the securities of the Company have been admitted by the Council of The Stock Exchange to the Official List.

Particulars relating to the Company and its securities are available in the Extel Statistical Services and copies of these particulars may be obtained during usual business hours (Saturdays excepted) between 31st October and 14th November, 1977, both dates inclusive, from:

Herbert Smith & Co.
62 London Wall,
London EC2R 7JP

Hoare Govett Limited,
1 King Street,
London EC2V 8DU.

31st October, 1977

INTERNATIONAL COMPANY NEWS

CONDOTTE D'ACQUA

Sale to U.S. banks vetoed

BY PAUL BETTS

BACKING DOWN to strong parent company, the giant State trade union pressure, the Italian Prime Minister, Sig. Giulio Andreotti, has vetoed the sale of the State-controlled civil engineering company, Condotte D'Acqua, to a consortium of Texan banks grouped together by the former U.S. Treasury Secretary, Mr. John Connally.

The veto came only 24 hours before the arrival here today of the U.S. Treasury Secretary, Mr. Michael Blumenthal and there is now concern that the Prime Minister's decision could discourage American banks and major companies from making fresh investments in Italy.

Italy's main Trade Union Confederation had earlier threatened an all-out confrontation against the Government breaking a valuable six-month-old Government-Union truce should the sale be approved. Both the Condotte

parent company, the giant State holding, Istituto per LA Ricostruzione Industriale (IRI), and the Minister of State Holdings, Sig. Antonio Bisaglia, had indicated they favoured the sale.

The deal-involving after nearly four months of negotiations the sale of IRI's 52 per cent stake in Condotte for Lbn. (about £10m.) to a consortium including the First Citibank Corporation of Texas, the Bank of South Texas, the Texas Linbeck Construction Corporation and the Italian Federconsorzi concern—was linked directly with the salvage of Italy's largest private construction and engineering group, Societa Generale Immobiliare (SGI).

It is currently crippled by accumulated debts with the Italian banking system totalling more than L200bn. (more than £130m.) largely as a result of foreign exchange and commodity

market losses during the former management of the controversial financier, Sig. Michele Sindona. The SGI rescue plan would have seen Condotte, once private, subscribe to an SGI capital increase and become the majority shareholder in the troubled company.

But the trade unions issued an ultimatum threatening to break off all relations with Sig. Andreotti's minority Christian Democrat Government if Condotte was sold to private interests and used for the SGI rescue operation.

The Prime Minister's veto has now rekindled fears of an SGI collapse which is widely regarded here as a serious banking crisis, given the extent of banking credits to the former Sindona empire. The company is reported to be seeking bank rescue credits for its October salary payments.

ROME, Oct. 30.

U.S. car plant closures

BY JOHN WYLES

SALES bottlenecks at the start of the new model year have prompted surprise shutdowns by Chrysler and American Motors. The United States two smallest car companies.

Chrysler's closure for a week beginning November 7 of its

Lynch Road Detroit plant will make 4,000 hourly paid workers idle and will halt production of its two medium sized cars, the Plymouth Fury and the Dodge Monaco. The company has 87 days' supply of the Fury and 102 of the Monaco and generally feels uncomfortable when stocks reach the 75 days mark.

American Motors is shutting down one of its two assembly lines at Kenosha Wisconsin because of an oversupply of Pacer and Matador models.

American Motor's problems are familiar. Its market share this year has dipped from nearly three per cent to 2.5 per cent—but Chrysler's problems are genuinely surprising. Explanations from within the company indicate that its dealers are still carrying too many 1977 models.

Herstatt chiefs charged

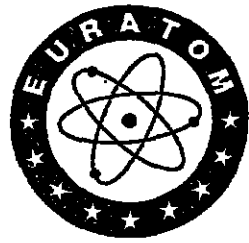
MORE THAN three years after the collapse of Bankhaus Herstatt with losses of some DM1.2bn., official charges have been brought against eight people involved in the Bank's operations.

The charges include currency speculation to the prejudice of customers' interests, balance sheet falsification and misleading both private individuals and firms as to the Bank's solvency.

Leading figures named in Cologne by the Public Prosecutor's office are the former head of the Bank, Herr Ivan D. Herstatt, the Chief Representative Count Bernhard Von Der Goltz, the Head of the Foreign Department, Herr Heinz Bedderich, and the Chief Foreign Exchange dealer, Herr Dany Dattel.

New Issue All of these bonds having been sold, this announcement appears as a matter of record only. October 31, 1977

European Atomic Energy Community (EURATOM)



DM 200,000,000

5% % Bearer Bonds of 1977/1987

Interest rate: 5% % p. a., payable annually on November 1 of each year
Issue price: 99 1/4 %
Life: 10 years
Redemption: at par on November 1, 1987
Listing: Frankfurt (Main), Berlin, Düsseldorf, Hamburg and München

DRESDNER BANK ANTENNEGESELLSCHAFT	DEUTSCHE BANK ANTENNEGESELLSCHAFT	COMMERZBANK ANTENNEGESELLSCHAFT	WESTDEUTSCHE LANDESBANK GIROZENTRALE
ALGEMENE BANK NEDERLAND N.V.	BANCA COMMERCIALE ITALIANA	CREDIT SUISSE WHITE WELD	KREDIETBANK S.A. LUXEMBOURGEOISE
BANQUE NATIONALE DE PARIS	BANQUE POPULAIRE SUISSE S.A. LUXEMBOURG	UNION BANK OF SWITZERLAND (SECURITIES)	SWISS BANK CORPORATION (OVERSEAS)
			S. G. WARBURG & CO. LTD.
ABD SECURITIES CORPORATION	ALAHLI BANK OF KUWAIT (K.S.C.)	AMEX BANK	A. E. AMES & CO.
THE ARAB AND MORGAN GRENPELL	AMSTERDAM-ROTTERDAM BANK N.V.	FINANCE COMPANY LIMITED	ARAB FINANCIAL CONSULTANTS
	BANCA DEL GOTTARDO		COMPANY S.A.J.K.
	BANK OF AMERICA INTERNATIONAL		BANCA NAZIONALE DEL LAVORO
	BANK FOR GEMENWERTSCHAFT		BANKERS TRUST INTERNATIONAL
	BANK OF ARABIE ET INTERNATIONALE		BANK LEU INTERNATIONAL LTD.
	D'INVESTISSEMENT (S.A.L.L.)		BANQUE FRANCAISE
	BANQUE GENERALE DU LUXEMBOURG S.A.		DU COMMERCE EXTERIEUR
	BANQUE DE NEUILIZE, SCHULMBERGER,		BANQUE INTERNATIONALE A LUXEMBOURG
	BANQUE DE PARIS ET DES PAYS-BAS		S.A.
	BANQUE DE L'UNION EUROPEENNE		BANQUE ROTHSCHILD
	BARING BROTHERS & CO.		BARCLAYS BANK INTERNATIONAL
	JOH. BERENBERG, GOSSLER & CO.		LIMITED
	CAISSE DES DEPOTS ET CONSIGNATIONS		BAYERISCHE VEREINSBANK
			BERLINER HANDELS- UND FRANKFURTER BANK
			COMPAGNIE LUXEMBOURGEOISE
			DE LA DRESDENER BANK AG
			DRESDENER BANK INTERNATIONAL
			DE LA DRESDENER BANK AG
			DWA EUROPE N.V.
			DEN NORSKE CREDITBANK
			DEUTSCHE LANDESBANK
			ANTENNEGESELLSCHAFT
			EUROPEAN BANKING COMPANY
			LIMITED
			GENOSSENSCHAFTLICHE ZENTRALBANK AG
			VIENNA
			GROUPEMENT DES BANQUIERS PRIVES
			GENEVOIS
			HARDY-SLOMAN BANK GMBH
			HILL SAMUEL & CO.
			INDUSTRIEBANK VON JAPAN (DEUTSCHLAND)
			ISTITUTO BANCARIO SAN PAOLO DI TORINO
			KLEINWITZ, BENSON
			KUWAIT FOREIGN TRADING CONTRACTING
			& INVESTMENT CO. (S.A.K.)
			LAZARD BROTHERS & CO.
			LIMITED
			LLYODS BANK INTERNATIONAL
			MERRILL LYNCH INTERNATIONAL & CO.
			THE NIKKO SECURITIES CO., (EUROPE) LTD.
			OSTERREICHISCHE LANDESBANK
			PIERSON, HELDING & PIERSON N.V.
			REUSCHEL & CO.
			J. HENRY SCHRODER WAGG & CO.
			SMITH BARNEY, HARRIS UPHAM & CO.
			JOHN HENRY SCHRODER
			STRAUSS, TURNBULL & CO.
			UBS - DB CORPORATION
			J. VONTOBEL & CO.
			WOOD GUNNY
			YAMAICHI INTERNATIONAL (EUROPE)
			LIMITED

1st DECEMBER 1977 REDEMPTION BARCLAYS BANK INTERNATIONAL LIMITED

8 1/2% CAPITAL BONDS 1986
NOTICE IS HEREBY GIVEN in satisfaction of the obligations imposed by Condition 5 (A) of the Terms and Conditions applicable to the Bonds, the Bonds bearing the serial numbers listed below have been drawn in manner approved by the Trustee for redemption on 1st December 1977 at their principal amount.

00020	00028	00034	00043	00055	00087	00107	00111	00114	00136	00177	00208	00216	00217	00232	00247	00250	00
00286	00275	00290	00327	00330	00366	00368	00377	00381	00395	00422	00429	00430	00478	00507	00543	00544	00
00585	00629	00659	00701	00715	00718	00794	00758	00740	00748	00775	00811	00838	00854	00865	01010	01	
01035	01038	01039	01043	01045	01083	01115	01120	01180	01183	01246	01271	01287	01307	01320	01450	01494	01
01557	01561	01584	01595	01597	01615	01620	01680	01683	01686	01699	01703	01719	01778	01827	01901	01924	01
01959	02011	02061	02094	02173	02190	02234	02314	02371	02394	02399	02406	02494	02495	02499	02541	02554	02
02571	02660	02661	02670	02683	02710	02714	02764	02768	02770	02807	02822	02867	02893	03075	03081	03133	02
03176	03192	03198	03250	03267	03289	03357	03402	03459	03522	03524	03600	03603	03616	03670	03675	03688	03
03770	03909	03915	03927	03932	03985	03991	04014	04027	04033	04046	04065	04083	04086	04116	04133	04145	03
04210	04266	04286	04297	04308	04325	04386	04371	04427	04431	04439	04443	04447	04452	04451	04457	04460	03
04495	04724	04725	04739	04742	04744	04755	04768	04787	04809	04819	04843	04856	04864	04881	04910	04915	03
04945	04958	04979	04982	04983	04978	04979	04980	05001	05025	05030	05032	05033	05034	05035	05036	05037	03
05117	05118	05200	05233	05241	05279	05280	05281	05282	05283	05284	05285	05286	05287	05288	05289	05290	03
05435	05440	05466	05488	05508	05524	05547	05559	05604	05612	05620	05624	05627	05630	05637	05640	05641	03
05717	05725	05764	05769	05776	05784	05830	05836	05839	05873	05891	05895	05896	05897	05898	05899	05900	03
05997	06010	06042	06078	06081	06091	06106	06121	06124	06125	06126	06127	06128	06129	06130	06131	06132	03
06209	06312	06373	06375	06348	06357	06416	06430	06438	06441	06454	06472	06518	06544	06571	06579	06582	03
06617	06631	06669	06674	06675	06730	06744	06788	06799	06801	06840	06859	06860	06863	06871	06872	06873	03
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07095	07096	07102	07112	07113	07162	07241	07249	07258	07269	07283	07284	07285	07286	07287	07288	07289	03
07508	07511	07517	07537	07542	07549	07567	07567	07568	07577	07578	07582	07583	07584	07585	07586	07587	03
07627	07649	07655	07652	07650	07719	07735	07752	07767	07774	07785	07782	07783	07782	07785	07784	07782	03
07811	07821	07827	07837	07898	07972	07989	08002	08004	08013	08015	08018	08019	08021	08022	08023	08024	03
08206	08223	08243	08270	08280	08301	08315	08325	08345	08368	08367	08378	08383	08384	08385	08386	08387	03
08487	08556	08573	08588	08589	08630	08640	08709	08714	08739	08746	08756	08766	08777	08821	08841	08855	03
08800	08810	08811	08844	08848	08849	08973	09005	09014	09025	09029	09049	09055	09067	09093	09105	09110	03
09205	09216	09217	09218	09219	09220	09353	09361	09411	09412	09413	09414	09415	09416	09417	09418	09419	03
09715	09716	09717	09718	09719	09720	09721	09722	09723	09724	09725	09726	09727	09728	09729	09730	09731	03
09907	09908	09920	09929	09944	09950	10013	10017	10047	10077	10129	10134	10140	10145	10195	10219	10222	10
10240	10241	10251	10268	10330	10344	10368	10385	10397	10405	10421	10428	10484	10489	10492	10545	10553	10
10593	10570	10611	10613	10619	10635	10666	10670	10671	10672	10685	10712	10720	10721	10727	10744	10760	10
10774	10811	10828	10833	10870	10880	10896	10919	10940	10993	10998	11002	11009	11032	11038	11095	11097	11
11172	11173	11182	11190	11224	11228	11236	11239	11244	11256	11264	11310	11339	11352	11358	11364	11395	11
11407	11408	11410	11411	11412	11413	11414	11415	11416	11417	11418	11419	11420	11421	11422	11423	11424	11
11844	11846	11861	11867	11878	11883	12001	12012	12023	12026	12034	12064	12115	12116	12117	12118	12119	11
12212	12213	12233	12269	12294	12301	12304	12315	12317	12319	12324	12373	12385	12391	12405	12418	12422	12
12428	12454	12528	12549	12588	12607	12633	12639	12651	12656	12667	12674	12687	12693	12700	12708	12751	12
12790	12794	12802	12807	12831	12856	12872	12902	12903	12904	12917	12928	12942	12962				

This announcement appears as a matter of record only.

\$150,000,000

Republic of Venezuela

\$100,000,000 Seven Year 8 1/8% Notes Due 1984

\$50,000,000 Fifteen Year 8 3/4% Notes Due 1992

Interest payable April 15 and October 15

MORGAN STANLEY & CO.

THE FIRST BOSTON CORPORATION

SALOMON BROTHERS

- List of financial institutions including KUHN LOEB & CO., GOLDMAN, SACHS & CO., MERRILL LYNCH, PIERCE, FENNER & SMITH, etc.

ULTRAFIN INTERNATIONAL CORPORATION

October 31, 1977.

These securities having been sold, this announcement appears as a matter of record only.

NEW ISSUE

SEPTEMBER, 1977



Banque Nationale d'Algérie

US \$30,000,000

Floating Rate Notes due 1982

Issue price 100 per cent.

- List of banks and financial institutions including Kuwait Investment Company (S.A.K.), Banque Nationale de Paris, etc.

- Abu Dhabi Investment Company, Alahli Bank of Kuwait (K.S.C.), Algemene Bank Nederland N.V., etc.

- Credito Italiano (Underwriters) S.A., Dai-ichi Kangyo Bank Nederland N.V., DG BANK Deutsche Genossenschaftsbank, etc.

All of these Securities have been sold. This announcement appears as a matter of record only.

\$60,000,000



SOCIETE GENERALE

Floating Rate Notes Due 1984

SOCIETE GENERALE

MORGAN STANLEY INTERNATIONAL

- AMSTERDAM-ROTTERDAM BANK N.V., CREDITANSTALT-BANKVEREIN, DEUTSCHE BANK, IBI INTERNATIONAL, MORGAN & CIE S.A., SWISS BANK CORPORATION (OVERSEAS), etc.

Southern Malayan Tin Dredging (M) Berhad. This advertisement is issued in compliance with the requirements of the Council of the Stock Exchange in London. It is not an invitation to any person to subscribe for or purchase any shares.

Southern Kinta Consolidated (M) Berhad. This advertisement is issued in compliance with the requirements of the Council of the Stock Exchange in London. It is not an invitation to any person to subscribe for or purchase any shares.

OVERSEAS MARKETS

EUROBONDS

BY MARY CAMPBELL

CURRENT EUROBOND ISSUES

Table listing Eurobond issues with columns for Borrowers (U.S. Dollars, D-Marks, etc.), Amount, Maturity, Av. life, Coupon, Price, and Lead manager.

THE NEARLY three-week pause in announcements of new Eurodollar bond issues ended on Friday evening with the \$50m. issue of Norsk Hydro.

Market holding steady. The relative stagnation in the U.S. dollar sector is likely to concentrate even more attention on the possibility of further new issues as soon as sterling started to recover.

However, it seems that, contrary to some market reports, the Bank of England is not currently against the idea of sterling denominated Eurobond issues in principle.

mean that bond holders would pay \$1.70 for each £1,000 bond. If the sterling/dollar exchange rate were to fall to \$1.40 for £1,000, the interest received would be 27 per cent of £1,000 at \$2 per £1, then the exchange rate would have to fall to \$1.20 for £1,000 to make the investment worthwhile.

BOND TRADE INDEX AND YIELD. Table with columns for Medium term, Long term, Convertible, and U.S. dollar bonds.

Y. E. S. ALL COMMON. Table with columns for Oct. 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.

GERMANY. Table with columns for Oct. 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.

JOHANNESBURG. Table with columns for Oct. 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.

Indices

NEW YORK - DOW JONES. Table with columns for Oct. 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.

MONTEREAL. Table with columns for Oct. 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.

AMSTERDAM. Table with columns for Oct. 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.

PARIS. Table with columns for Oct. 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.

STANDARD AND POORS

Table with columns for Oct. 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.

NEW YORK

Table with columns for High, Low, Stock, and various market indicators.

INVESTMENT PREMIUM BASED ON \$2.60 PER £-93 1/4 (94 1/2%)

Table with columns for High, Low, Stock, and various market indicators.

AMSTERDAM

Table with columns for High, Low, Stock, and various market indicators.

OVERSEAS SHARE INFORMATION

Table with columns for High, Low, Stock, and various market indicators.

NEW YORK

Table with columns for High, Low, Stock, and various market indicators.

CANADA

Table with columns for High, Low, Stock, and various market indicators.

AMSTERDAM

Table with columns for High, Low, Stock, and various market indicators.

ALIED CHEMICAL CORP. says its board voted to increase its regular quarterly dividend to 50 cents a share from 45 cents.

AUTHORISED UNIT TRUSTS

OFFSHORE AND OVERSEAS FUNDS

Table of Authorised Unit Trusts listing various funds such as British Life Office, Guinness, and others with their respective details and performance metrics.

Table of Offshore and Overseas Funds listing international investment vehicles like Fidelity, Guinness, and others, detailing their assets and investment strategies.

Table of Financial Times Stock Indices showing performance for various sectors and indices over different time periods.

INSURANCE, PROPERTY, BONDS

Table of Insurance, Property, and Bonds listing various financial products and services offered by different companies.

Table of Highs and Lows S.E. Activity showing price movements for various stocks in the Southeast Asian market.

Table of Financial Times Stock Indices showing performance for various sectors and indices over different time periods.

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NOTES: Additional information and disclaimers regarding the data presented in the tables.

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FT SHARE INFORMATION SERVICE

HOTELS—Continued

AMERICANS—Continued

BUILDING INDUSTRY—Cont.

DRAPERY AND STORES—Cont.

ENGINEERING—Continued

INDUSTRIALS (Miscel.)

**BRITISH FUNDS

Table with columns: Stock, Price, Div, Yield, etc.

"Shorts" (Lives up to Five Years)

Table listing various financial instruments and their prices.

Over Fifteen Years

Table listing various financial instruments and their prices.

Undated

Table listing various financial instruments and their prices.

**INTERNATIONAL BANK

Table listing international bank shares.

**CORPORATION LOANS

Table listing various corporation loans.

COMMONWEALTH & AFRICAN LOANS

Table listing various Commonwealth and African loans.

LOANS (Miscel.)

Table listing various miscellaneous loans.

FOREIGN BONDS & RAILS

Table listing various foreign bonds and rails.

AMERICANS

Table listing various American stocks.

CANADIANS

Table listing various Canadian stocks.

BANKS AND HIRE PURCHASE

Table listing various banks and hire purchase companies.

Hire Purchase, etc.

Table listing various hire purchase and other financial services.

BEERS, WINES AND SPIRITS

Table listing various beer, wine, and spirit companies.

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BUILDING INDUSTRY, TIMBER AND ROADS

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HOTELS AND CATERERS

Table listing various hotels and caterers.

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INSURANCE-Continued

Table listing various insurance companies and their stock prices, including British Overseas Airways, British Airways, and others.

INSURANCE-Continued

Table listing various insurance companies and their stock prices, including British Overseas Airways, British Airways, and others.

PROPERTY-Continued

Table listing property-related companies and their stock prices, including British Overseas Airways, British Airways, and others.

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PAPER, PRINTING ADVERTISING

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SANWA BANK Tokyo, Japan

MINES-Continued CENTRAL AFRICAN

Table listing Central African mines and their stock prices.

AUSTRALIAN

Table listing Australian mines and their stock prices.

TINS

Table listing tin companies and their stock prices.

OVERSEAS TRADERS

Table listing overseas traders and their stock prices.

COPPER

Table listing copper companies and their stock prices.

MISCELLANEOUS

Table listing miscellaneous companies and their stock prices.

NOTES

Notes section containing various financial notices and company announcements.

REGIONAL MARKETS

Table listing regional market data and stock prices.

OPTIONS 3-month Call Rates

Table listing options and 3-month call rates.

DIAMOND AND PLATINUM

Table listing diamond and platinum prices.

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Replacement is sought for shipbuilding fund

By IAN HARGREAVES, SHIPPING CORRESPONDENT

THE GOVERNMENT has begun to consider what should succeed its £65m shipbuilding intervention fund, which is designed to subsidise British yards for their uncompetitive prices when bidding for orders against foreign competition.

It is expected that the fund will run dry this year rather than next spring, as had been unofficially forecast when it was established last February.

The biggest slice of the fund has been accounted for by a £20m subvention used to secure a £15m order for British Shipbuilders from Poland. This has left a balance of about £12m.

Orders being negotiated by British Shipbuilders with Furness Withy and an Indian shipping line will account for this £12m, if they are confirmed, leaving no cover for other bids. Certain orders on the horizon such as that between Govan

Shipbuilders and the Malacca Corporation of the Philippines. Government Ministers are not keen to be seen making obvious preparations for phase two of the intervention fund, because the EEC is examining member countries' shipbuilding credit schemes with the aim of achieving a more uniform policy.

Equally, it is being made clear that when the present fund does run out a replacement will be found, with or without EEC blessing.

The EEC Commission gave half-hearted approval to the £65m fund on the understanding that when it expired, British Shipbuilders would be ready with a corporate plan to slim the industry.

M. Fernand Braun, the Commission's director-general of industrial affairs, said last week that State aid to shipbuilding industries within the community

would be more closely monitored in future. No decision has been taken yet on the form the new intervention fund should take, but its inauguration is likely to require parliamentary approval in some form—unlike the present fund.

The urgency for a decision has been caused by a better than expected flow of orders to British Shipbuilders this year. A total of 500,000 gross tons has been booked so far and this is expected to rise to 700,000 by the end of the year. This compares with 383,000 tons in 1976 and a paltry 67,000 the year before.

There can be no doubt that use of the intervention funds has given these figures the decisive boost. Its use has been promoted vigorously by ministers, who have called in U.K. shipowners intending to place orders abroad.

This approval has been

successful in some cases, although there were nasty scenes in Whitehall recently when Ocean Transport and Trading of Liverpool refused to bow to pressure to order three container ships from a home yard rather than from Poland.

The big British Shipbuilders deal with Poland, which the Prime Minister confirmed had been won at the beginning of this month, should be signed within a week.

The main sticking point in the past three weeks has been over the proportion of the 24 vessels' equipment to come from Poland.

Most of these questions have now been settled, but on Friday a Polish negotiating team was still insisting that the main engines of some of the smaller vessels in the order be built in Poland. Britain's position is that main engines for all 24 ships must be U.K.-built.

Blast damages Abadan refinery

By Andrew Whitley

TEHRAN, Oct. 30.

A RUCE explosion at the Abadan oil refinery this morning is reported to have killed five workers and injured 20 others.

Many people suffered burst ear drums in an explosion that was heard more than 10 miles away and caused considerable damage in the town of Abadan itself, but no estimate of the damage to the complex was available today. The capacity of the refinery, which is owned and run by the National Iranian Oil Company, is being expanded to 600,000 barrels a day, making it once again the largest in the world.

It is also Iran's only export refinery and today's explosion may well have a serious short-term effect on its output.

According to the company, the explosion took place in a heat-exchanger No. 5 within the refinery's furnace. The exchanger was one of the refinery's oldest units. The cause of the explosion is not yet known, but the damage he estimated, but an investigation is under way.

The explosion came at a time when the company needs as much refining capacity as possible to meet domestic demand. New facilities there were scheduled to have come on stream in 10 days' time.

In normal times Iran needs all the middle and top distillation capacity it has, for petrol, aviation fuel and so on—that is four refineries can produce. Demand is rising steeply and shortages have led to a black market in those products used for heating.

A sudden cold snap in the last few days has meant that in Tehran alone the consumption of gas has gone up from 2m to 3.5m litres a day, and may rise to 10m.

Iranian Oil, therefore, has the problem of disposing ahead of about 300,000 to 350,000 bbl of unattractive heavy fuel oil.

It is known to have already reached agreement with several industrial consortium members at what is thought to be a considerable discount on the price which it used to get from the consortium itself.

Liberal leaders also expect to gain electoral advantage from being associated with Government measures during the session to provide additional aid to inner city areas and with a housing Bill which is expected to make interest-free loans available to young, first-time house-buyers.

Other concessions expected from the Government include promises of tougher action in the field of consumer protection, although early legislation seems unlikely.

Labour MPs believe the Government plans to include a Bill to provide generous redundancy payments to the shipbuilding industry in anticipation of a rationalisation programme for the nationalised shipyards.

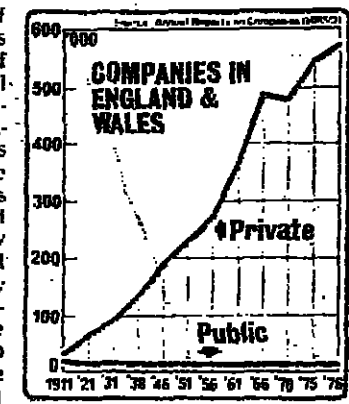
In general there will be little to invigorate the Left-wing legislation on industrial democracy has been shelved, but some attempts may be made to begin the participation process in the nationalised industries.

Wealth tax proposals, have been deferred, as have plans to reform the Official Secrets Act. In addition, Liberal proposals appear to have blocked any prospect of legislation to give postal workers the right to strike or unions a 50 per cent representation on the Boards of pension schemes.

THE LEX COLUMN Three tiers in company sector

Today the Department of Trade will announce that it is considering a radical re-organisation of company law which could involve a changeover to a multi-tier disclosure and incorporation system. Such a policy has already been advocated by the accountancy profession and is to some extent being dictated by the second EEC company law directive, and the proposed fourth directive on company accounts which is due for adoption in the near future by the Council of Ministers. It also happens to coincide with the Government's new-found attempt at understanding the problems of smaller firms.

There now appears to be wide agreement that it was a mistake to abolish the exempt private company category in the 1967 Companies Act. Although this had been advocated in the 1962 Jenkins report on company law reform it is doubtful whether that committee wanted to achieve anything more than public filing of basic accounts by exempt companies. Instead the 1967 Act went all the way and brought every limited company under the same disclosure rules, with a few minor exceptions.



have three tiers which would be so arranged that there would be a tier for large companies, a tier for medium-sized companies, and a tier for small companies. The latter two tiers would be subject to less stringent disclosure requirements than the first tier.

Having established the categories of company it would then be possible to adjust disclosure requirements. But for a start the accountants suggest that all "proprietary" companies should not have to satisfy any disclosure requirements such as for internal and sectional reports why "exempt" companies might be relieved from having to disclose directors' and employees' emoluments, and possibly from having to produce a directors' report or having their accounts audited.

But even if these reforms are introduced the U.K. will still be far more demanding than other European countries such as France and Germany, which not only treat their *Sociétés* and *GmbH's* under separate company laws from the SA's and the AG's, but also exempt almost all small companies from a proper audit and any obligation to file more than very basic accounts. Having said all this it remains extremely curious that the U.K. should have more registered companies than all the other EEC countries taken together, although the numbers are at least partly made up of unincorporated businesses.

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No progress in talks over car dispute

By Pauline Clark, Labour Staff

UNION leaders in a dispute which has halted all production at Chrysler's Linwood motor factory for the last 12 days and made 7,000 workers idle were round the table for the third time in Glasgow last night.

But union officials offered little hope of success.

As the talks, arranged by the Scottish TUC and the Advisory Conciliation and Arbitration Service, went on late into the night, Mr. James Milne, STUC general secretary, said that nothing had emerged to help a settlement.

The company, which lost about £2m a day, insists that Linwood should not reopen until unions agree to co-operate on improving production.

Chrysler blames Linwood for its £15m losses in the first nine months of this year and last Friday warned of the danger to the survival of the company if a settlement were not reached.

Shop stewards claim that the proper consultation procedure has not been pursued in changes made on the production line and demand a return to their former positions.

At Yeathall, where production in all three plants has been at a standstill for five days, costing more than 3,000 vehicles, there was no move over the weekend to end the deadlock in a strike over differentials.

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